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SITE INVESTIGATION FOR DEAD CREEK SECTOR B AND SITES L AND M, SAUGET-CAHOKIA, ILLINOIS

March 1992

Prepared for

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SITE INVESTIGATION
FOR DEAD CREEK SECTOR B
AND SITES L AND M,
SAUGET-CAHOKIA, ILLINOIS

March 30, 1992

Geraghty & Miller, Inc. is submitting this report to Monsanto Company for an investigation of Sector B and Sites L and M of Dead Creek in Sauget-Cahokia, Illinois. The report was prepared in conformance with Geraghty & Miller's strict quality assurance/quality control procedures to ensure that the report meets the highest standards in terms of methods used and the information presented. If you have any questions or comments concerning this report, please contact one of the individuals listed below.

Respectfully submitted,

GERAGHTY & MILLER, INC.

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SITE INVESTIGATION FOR DEAD CREEK SECTOR B AND SITES L AND M, SAUGET-CAHOKIA, ILLINOIS

1.0 INTRODUCTION

At the request of Monsanto Company, St. Louis, Missouri, Geraghty & Miller, Inc. has conducted a site investigation for Dead Creek Sector B and Sites L and M, Sauget-Cahokia, Illinois. This report documents field activities and presents data collected in accordance with Geraghty & Miller's September 1991 Work Plan (Geraghty & Miller, Inc., 1991). Additional work that was completed beyond the scope of the work plan is discussed in Section 2.0 (Investigation Field Activities). The purpose of the study was to characterize conditions at the sites by determining the nature and extent of sediment/fill materials that are present and to estimate the volume of material affected by organic compounds and/or metals. The data collected during this study can serve as a basis for evaluating potential remedial options. Each of these three sites was previously investigated by Ecology & Environment, Inc. (E&E) as a subcontractor for the Illinois Environmental Protection Agency (IEPA) during a site assessment program (Ecology & Environment, Inc., 1988).

1.1 SCOPE OF WORK

The field investigation consisted of a focused program in which specific testing locations at each site were selected based upon historical information and results obtained during previous investigations. These investigations are discussed in detail in Section 1.2.2 (Site History) and Section 1.2.3 (Previous Investigations). A soil boring and analytical program was conducted at each of the sites to characterize the nature of the sediment/fill material and determine the areal extent of potential impact. In addition to characterizing the sediment/fill material at each site through analysis of organic chemicals and metals, selected samples were also analyzed for reactivity, ignitability, corrosivity, and toxicity using

the Toxicity Characteristic Leaching Procedure (TCLP) to determine if the sediment/fill should be classified as hazardous waste. Additional field work was conducted at Site M that was outside the scope of work in the work plan to better define the nature and extent of sediment/fill. This work consisted of sediment depth profiling and the collection of additional samples for laboratory analysis.

1.2 SITE BACKGROUND

A description of the site locations, site history, and previous investigations is presented in the following sections.

1.2.1 Site Location and Description

The study area, which includes Dead Creek Sector B and Sites L and M, is located in Sauget and Cahokia, Illinois. The sites are located on the north-central part of the Cahokia, Illinois-Missouri U.S. Geological Survey (USGS) topographic quadrangle (Figure 1-1). Dead Creek Sector B extends about 1,950 feet in length and lies between Queeny Avenue to the north and Judith Lane to the south. Sector B encompasses an area of about 131,000 square feet (ft^2) (see Figure 1-2). The northernmost 450 feet of Dead Creek Sector B were not included in this investigation because access was not granted to Monsanto. In general, the creek area consists of a narrow channel that is about 5 feet wide. Water levels in the creek vary substantially, depending on precipitation and water-table fluctuations. During periods of little precipitation and low water table, the creek becomes a dry ditch. The channel of the creek-bed is flanked on either side by a low bank, which may often be under water. The channel and the low banks are enclosed by steeper, heavily vegetated banks. Standing water usually cannot drain out of Sector B to other parts of Dead Creek because the influent (north) and effluent (south) ends of Sector B have been sealed. However, during periods of heavy precipitation, flood waters from Queeny Avenue have been observed to discharge into Sector B.

Sites L and M are located adjacent to Dead Creek Sector B (see Figure 1-2). Site L is located on the east side of Sector B and approximately 700 feet south of Queeny Avenue. Based on a figure in a 1981 report prepared by the IEPA (St. John, 1981), the approximate dimensions of Site L are 70 feet by 150 feet. However, based on Geraghty & Miller's 1991 investigation, the dimensions of Site L are about 65 feet by 135 feet, encompassing an area of about 7,600 ft^2, as shown on Figure 1-2. This discrepancy may be due to the site boundaries drawn by IEPA, which were based only on aerial photographs. For the purposes of this study, the site boundaries will be drawn consistently with those depicted on Figure 1-2. Site L is located on property owned by Metro Construction Company. The site is covered with black cinders, and construction vehicles are parked throughout the area. Access to the site is not restricted.

Site M is adjacent to the southeast part of Sector B and is about 200 feet north of Judith Lane. The site is a water-filled pit that was reportedly formed by past sand mining activities. Presently, water within the pit is up to 14 feet deep. Site M is connected to Dead Creek Sector B by a drainage way which allows water to flow between the sites. The dimensions of Site M are about 220 feet by 320 feet, encompassing an area of about 59,200 ft^2, as shown on Figure 1-2. Site M and Dead Creek Sector B are surrounded by a chain-link fence that the U.S. Environmental Protection Agency (USEPA) installed in 1982 to restrict access.

1.2.2 Site History

Formerly, Dead Creek provided drainage for part of the Mississippi floodplain. Water in the creek flowed in a southwesterly direction to the Prairie Dupont Floodway, which ultimately discharged to the Cahokia Chute of the Mississippi River. However, since the early 1970s, area residents have filed complaints with the Cahokia Health Department regarding discharges to the creek (Ecology & Environment, Inc., 1988). As a result of these complaints, the culverts on the north and south ends of Sector B were sealed to prevent surface water from flowing freely into or out of that part of the creek. Additionally, the

creek may have been affected by former pits or excavations (e.g., Sites L and M) adjacent to its banks (St. John, 1981). Since that time, the USEPA and IEPA have conducted site inspections and studies of Dead Creek and adjacent former pit/excavation areas.

Site L was used as a disposal impoundment basin by Harrold Waggoner and Company, a trucking firm which operated at the site from 1964 to 1974. Discharges to the impoundment at Site L began after 1971, after Harrold Waggoner and Company was cited by the IEPA for discharges directly into Dead Creek within Sector B. Ruan Trucking Company also used the impoundment basin for disposal purposes after they purchased the operation in 1974. Disposal activity at Site L ceased after 1978 when the property was sold to Metro Construction Company, the site's present owner (Ecology & Environment, Inc., 1988). The site is covered with cinders and, along with adjacent areas, serves as a depot for large construction machinery.

Site M was a sand mining area excavated in the 1940s by H.H. Hall Construction Company. This area was mined prior to any residential development along Walnut Avenue, which is east of Site M. The 1988 E&E report identifies the owner of the property as Thomas Owen.

1.2.3 Previous Investigations

In 1980, the IEPA initiated an investigation of Dead Creek and adjacent areas as a result of complaints from local area residents. The IEPA study (St. John, 1981) consisted of analyzing 31 soil samples (19 from Sector B) to determine the effect of past disposal practices. Information from five hand auger and 12 drill rig boring locations was used to characterize local geologic conditions. In addition, surface-water samples and ground-water samples were collected and analyzed. The study concluded that sediment samples collected from Dead Creek contained polychlorinated biphenyls (PCBs), organic compounds, and metals. The report also concluded that ground water and surface water had been affected by organic and inorganic constituents.

In 1986, E&E initiated a remedial investigation (RI) on behalf of the IEPA at several sites in the Sauget area, including Sector B and Sites L and M (Ecology & Environment, Inc., 1988). In Sector B, E&E collected two surface-water samples and five sediment samples from the north and south ends of the site. Sampling was not conducted in the central portion of Sector B. A summary of E&E's soil and sediment data is provided in Appendix A (Tables A-1 through A-4).

E&E drilled four soil borings to characterize conditions at Site L (Ecology & Environment, Inc., 1988). Data from the borings indicate that the former impoundment basin was excavated approximately 8 feet into material chiefly composed of sand with silt. The excavation was backfilled with material consisting of black cinders, clay, and concrete. The contact between the fill material and the underlying sand and silt deposits is believed to be an indication of the extent of the former impoundment. E&E reported that past disposal activities affected sediment and ground-water quality. Constituents detected included benzene, toluene, phenols, and arsenic. PCBs were not detected.

In 1986, E&E collected two surface-water samples and five sediment samples at Site M. Although the exact sample locations are not clear, it appears from E&E's ~~sample~~ location maps that the samples may have been collected from the edge of the ponded water. The analytical results for these samples indicated that the site sediments had been impacted by past disposal activities. However, it is not clear whether Site M was a disposal area or whether it was affected by surface-water drainage from Dead Creek. Surface-water samples did not exhibit constituent concentrations indicative of disposal impacts (Ecology & Environment, Inc., 1988).

The Avendt Group, Inc. (1990) completed a site investigation/remedial alternatives evaluation for Dead Creek Sector A, which is located upstream and north of Sector B on property owned by Cerro Copper Products Company. The Avendt Group, Inc. study consisted of a field program initiated in July 1989 to characterize and define the constituents in Sector A and determine the volume of sediments requiring remedial action. Ninety-nine

sediment samples were collected from 34 soil borings along ten transects of Sector A. The report concluded that fill deposits ranged in thickness from 1 to 15 feet, and creek channel sediments ranged in thickness from 0.5 to 11 feet. These materials contained concentrations of organic compounds and PCBs, as well as inorganic analytes, such as metals. The Avendt Group, Inc. estimated that approximately 19,500 cubic yards of creek bottom sediments had been affected by chemical constituents.

2.0 INVESTIGATION FIELD ACTIVITIES

A boring program was conducted by Geraghty & Miller from October 14 to November 5, 1991, to characterize the sediment/fill at each of the sites. Some additional field work was conducted at Site M that was not included in the work plan (Geraghty & Miller, Inc., 1991). These tasks included completing a sediment profile of Site M on December 3 and 4, 1991, and additional sediment/surface-water sampling for laboratory analysis on January 7 and 8, 1992. All drilling activity was conducted by Layne Western Company of Fenton, Missouri using Central Mine Equipment Company's, (CME) machinery and sampling devices. An inventory of the sampling activity and specific analysis required for each sample is provided in Table 2-1. Described below are the different sampling strategies, rationales, and methodologies for Sector B and Sites L and M. Access to Sector B and Site M was gained through lockable gates that were installed at three locations. Gate locations were chosen to facilitate movement into and out of the sites because of the steep banks within Sector B and Site M.

Prior to and immediately after conducting the field investigation, all drilling, surveying, and sampling personnel were required to undergo medical monitoring as a health and safety measure. Blood tests were performed for Layne Western, Lopinot and Wideman (surveyors), and Geraghty & Miller employees for a complete blood count (CBC), methemoglobin, PCBs, arsenic, lead, cadmium, chromium and lead, zinc protoporphyrin (ZPP). These results are on file with Geraghty & Miller's health and safety officer in Plainview, New York.

2.1 SECTOR B BORING PROGRAM

Sediment/fill samples were collected along ten profiles (transects) within the creek bed. The samples were spaced approximately 150 feet apart throughout the length of Sector B, with the exception of the northernmost 450 feet where property access could not be obtained. The sampling grid chosen for Dead Creek Sector B was similar to the IEPA-approved grid sampling conducted by the Avendt Group, Inc. (1990) in Sector A. As shown

on Figure 1-2, three borings were drilled along each of the ten profiles, for a total of 30 borings. Most of the borings were advanced using hollow-stem auger equipment mounted on an all- terrain vehicle. However, at some locations, where vehicle access was prohibitive because of soft ground, borings were advanced manually using a split-barrel core (split-spoon) sampler. All borings were advanced to determine the thickness of the sediment/fill in the creek and were spaced about 15 to 20 feet apart within each transect. Sample cores were collected using a 4-inch diameter, 5-foot continuous-tube sampler when advanced by the drill rig, and 3-inch diameter split-spoons when advanced manually. Both sampling methods provided a continuous record of the geology, as well as a sufficient volume of material for laboratory analysis. All samples were described by the Geraghty & Miller field geologist who recorded sample location, depth, grain size distribution, and color. Each sample was also screened in the field for the presence of volatile organic compounds (VOCs) using a photoionization detection (PID) instrument. Sample/core logs are provided in Appendix B.

Selected sediment samples from each boring were obtained for chemical analyses to determine the nature of the sediment/fill. Three sediment/fill samples were obtained from each transect (one sample from each boring). One of the samples within each transect was analyzed for the Target Compound List/Target Analyte List (TCL/TAL) parameters and the other two samples were analyzed for TCL PCBs and TAL metals. Samples selected for chemical analysis within each transect were obtained from different depths to provide a vertical profile of the sediment/fill. A schematic diagram is shown on Figure 2-1 for sampling profile A. This figure shows the depth of the three samples that were selected for chemical analysis from Dead Creek Sector B - Profile A. Profile A consisted of three borings designated as PA-B1, PA-B2, and PA-B3. PA-B1 and PA-B2 were advanced 10 feet each and PA-B3 was advanced 9 feet. A sample was collected at PA-B1 from 0 to 2 feet below grade for analysis of TCL/TAL parameters. From Boring PA-B2, a sample was collected from 2 to 4 feet below grade for analysis of TCL PCBs and TAL metals. The third sample from this profile was collected from Boring PA-B3 from 5 to 6 feet below grade and was also analyzed for TCL PCBs and TAL metals. Based on the previous investigations

described in Section 1.2.3, analyses focused on constituents (PCBs and metals) previously found at the site.

The criteria used for selecting a particular sediment/fill sample for laboratory analysis were based on PID measurements, stains, or odors. However, when samples within a given profile and/or boring were similar with regard to PID readings and visual appearance, the sample selected for chemical analysis of all TCL/TAL parameters was obtained from a 2-foot interval that best characterized sediment/fill in the creek. This interval was usually the center of the creek and from 0 to 2 feet below grade.

In addition to the samples collected for TCL/TAL analyses, a portion of each soil sample from the sediment/fill material was composited and submitted for analysis by TCLP and for reactivity, corrosivity, ignitability, and toxicity. Sediment/fill from each boring in profiles A and B was composited to create one TCLP sample; a composite of profiles C, D, and E created the second TCLP sample; profiles F, G, and H created the third TCLP sample, and profile I and J created the fourth TCLP sample from Sector B. As a quality assurance/quality control (QA/QC) measure, core barrel sampler rinse water samples were also collected to check decontamination procedures.

Each borehole was sealed with a mixture of drill cuttings and bentonite grout and the borehole's location and land surface elevation were surveyed by Lopinot & Wideman, Inc., an Illinois-licensed land surveyor. All drilling equipment was steam cleaned after each borehole, and all sampling equipment was decontaminated with a laboratory-grade detergent and potable water before the collection of each sample.

2.2 SITE L BORING PROGRAM

Seventeen borings were drilled at Site L from October 14 to 16, 1991, to delineate the boundaries of the former waste impoundment (see Figure 2-2). These borings

supplemented the existing data collected during the E&E investigation (Ecology & Environment, Inc., 1988).

At each boring location, samples were collected with a 3-inch diameter 2-foot split-barrel core sampler. Eight borings were drilled at the perimeter of the former impoundment (as originally identified by E&E) to determine its actual boundaries. The field geologist determined whether or not the boring was within the former impoundment basin based on thickness of backfill. The perimeter boring locations were chosen to ascertain the former impoundment basin boundaries and characterize the sediments believed to have been outside the boundaries of the former impoundment basin. The remaining borings were drilled near the center of Site L to determine maximum fill thickness and characterize sediment fill within the former impoundment basin. Sediment samples were collected from the center and perimeter of the former impoundment for laboratory analysis. Two composite samples, designated L-1 (3 to 8 feet) and L-1 (8 to 14 feet), were obtained from the center of Site L at Borings L-B16 and L-B17 from 3 to 8 feet below grade, and L-B17 from 8 to 14 feet below grade for analysis of all TCL/TAL parameters. These samples were also submitted for analysis of the TCLP parameters and reactivity, corrosivity, and ignitability to determine whether the material should be classified as hazardous waste.

Four samples were obtained from perimeter borings at discrete depths for analysis of TCL VOCs, semivolatile organic compounds (SVOCs), and TAL metals. Samples were obtained at Borings B-13, B-14, B-12, and B-10 and designated L-2, L-3, L-4, and L-5, respectively (see Table 2-1). Sample/core logs are provided in Appendix B. The samples selected for analyses were those that best characterized impacted soils within and near the perimeter of the former impoundment basin. The criteria for sample selection were visual indicators such as discoloration, and PID readings. Each sample was limited to a 2-foot section of the continuous core. As a QA/QC measure, a sample of the core barrel rinse water was analyzed for TCL/TAL parameters to determine the effectiveness of the decontamination procedures. Each borehole was sealed with grout and surveyed as described previously for Dead Creek Sector B.

2.3 SITE M BORING PROGRAM

Sediment sampling and profiling were conducted at Site M in three phases. On November 5, 1991, three sediment samples designated as M1, M2, and M3 were collected for chemical analysis (Figure 2-3). On December 3 and 4, 1991, sediment thickness measurements were obtained along a 40 foot by 40 foot rectilinear grid (Figure 2-4). On January 7 and 8, 1992, seven additional sediment samples and one surface-water sample were collected to supplement the data collected during the initial November sampling (Figure 2-3).

The purpose of the Site M study was to determine the nature and extent of sediments that may have been affected by past activities. The study of Site M focused on PCBs in the underlying sediment because of the previous findings of the IEPA (Ecology & Environment, Inc., 1988).

In November 1991, three borings were advanced from a pontoon boat using a tripod assembly. Split-barrel core samplers were advanced through a 4-inch diameter PVC pipe, which was set into the top of the sediment to seal off the surface water. Three sediment samples, designated as M1 (0 to 3 feet), M-2 (0 to 3.5 feet), and M3 (0 to 8 feet), were collected for laboratory analysis (Figure 2-3). The depth of the sample composite was based on sediment thickness. Samples M1 and M2 were analyzed for TCL PCBs and TAL metals, and sample M3 was analyzed for all TCL/TAL parameters. An aliquot of sediment from each of the three samples was composited on plastic sheeting and submitted for analysis of TCLP parameters and reactivity, corrosivity, and ignitability testing. Sample/core logs are provided in Appendix B.

Forty-four sediment thickness measurements were taken at Site M to determine the thickness and volume of bottom sediment in the pond (Figure 2-4). Water depths were

acquired first at each measurement location by lowering a graduated 3/4-inch PVC pipe. After the water depth was determined, the PVC pipe was manually advanced through the spongy sediment until it could not be advanced further, marking the contrast between the loose upper sediment and the underlying sands. The difference between the depth to top of the sediment and the depth to the bottom of the sediment is equal to the sediment thickness.

To supplement the analytical data from the initial three sediment samples collected in November, seven additional sediment samples were obtained for PCB analysis (Figure 2-3). To collect the samples, a 1-1/2 inch diameter, 15-foot long, PVC pipe with a closed airtight ball valve on one end was lowered through the water until it contacted the sediment surface. Once the sediment was encountered, the ball valve was opened and the PVC tube was advanced by hand as far as possible into the sediment; then the valve was closed. The tube was subsequently removed, and the sediment core extracted. The depth of penetration into the sediment deposit was limited to the upper foot of sediment. All seven samples (M-1A to M-7A) were submitted for PCB analyses.

2.4 SURVEY AND BASE MAP

Upon completion of all sampling activity, an Illinois-licensed surveyor (Lopinot & Wideman, Inc.) provided horizontal and vertical control for boring locations. This information was provided to Surdex, Inc. of St. Louis, Missouri so that a digitized base map of the site could be developed from an aerial photograph with the site-specific control. The digitized map developed by Surdex is provided in Appendix C.

3.0 PHYSICAL CHARACTERISTICS OF THE STUDY AREA

This section describes the physical setting of the sites. Discussed below are land use, topography and drainage, climate, and geology.

3.1 LAND USE

The Sauget area, which is located north of the study area, is heavily industrialized. More than half of the land use in the town of Sauget is industrial. The Sauget area is within a major transportation corridor provided by the Mississippi River, numerous interstate highways, and a large railroad center. Land use in Cahokia (southern part of the study area) is residential, commercial, and agricultural. Immediately adjacent to the central and southern portions of Sector B are cultivated fields. Site M is adjacent to a small residential area off Walnut Street and Judith Lane in Cahokia.

3.2 TOPOGRAPHY AND DRAINAGE

The study area is located on the flood plain of the Mississippi River and is within the physiographic region known as the American Bottoms. Generally, the land surface of the floodplain lies between elevations of 400 and 445 feet above the National Geodetic Vertical Datum (NGVD); locally, the sites are about 405 feet above NGVD. The topography of the area is predominantly flat, with the exception of the steep bank of Dead Creek. Surface runoff from the area flows toward Dead Creek Sector B, which ultimately drains into Site M.

3.3 CLIMATE

The climate of the site(s) area is continental with hot, humid summers and mild winters. Periods of extreme cold are short. The average annual rainfall in the area for the period from 1903 to 1983 was 35.4 inches; however, precipitation increased to 39.5 inches

per year during the period from 1963 to 1988 (Southwestern Illinois Metropolitan and Regional Planning Commission, 1983). The average annual temperature is 56°F; the highest average monthly temperature (79°F) occurs in July and the lowest average monthly temperature (32°F) occurs in January.

3.4 REGIONAL AND SITE GEOLOGY

The site(s) is situated on the floodplain of the Mississippi River (Figure 1-1). The floodplain is locally named the American Bottoms, and contains unconsolidated valley fill deposits composed of recent alluvium (Cahokia Alluvium), which overlies glacial material (Henry Formation). Published information indicates that these unconsolidated deposits are underlain by bedrock of Pennsylvanian and Mississippian age consisting of limestone and dolomite with lesser amounts of sandstone and shale.

The Cahokia Alluvium (recent deposits) consists of unconsolidated, poorly sorted, fine-grained materials with some local sand and clay lenses. These recent alluvium deposits unconformably overlie the Henry Formation, which is Wisconsinian glacial outwash in the form of valley train deposits. The Henry Formation is about 100 feet thick. These valley-train materials are generally medium to coarse sand and gravel and increase in grain size with depth.

During the various drilling programs conducted on-site, the alluvium underlying Dead Creek has been characterized as a silt with local clay and sand lenses (St. John, 1981). The deposits tend to become coarser with depth. The Avendt Group, Inc. (1990) categorized the stratigraphy in Sector A as being comprised of the following four units in descending order: fill material, fluidized creek bottom sediments, Cahokia Formation, and Henry Formation. The fill material is composed of a sand and silt matrix intermixed with concrete, bricks, road aggregate, rags, slag, and vitreous pellets. The fluidized creek bottom sediments are saturated silts with organic matter. The Cakohia and Henry Formations were described as presented in the literature.

Cross sections for the study area were developed with sample/core log data obtained during drilling operations to depict site geology with respect to topography. Cross section A-A' (Figure 3-1), cross section B-B' (Figure 3-2), and cross section C-C' (Figure 3-3) are useful in clarifying the geologic conditions at Dead Creek Sector B and Sites L and M. The line of section for Figure 3-1 is shown on Figure 2-2, the line of section for Figure 3-2 is shown on Figure 2-3, and the line of section for Figure 3-3 is shown on Figure 2-4.

Cross sections A-A' and B-B' show creek bottom elevations to be about 399 feet above NGVD and adjacent land surface elevations to be about 405 to 410 feet above NGVD. At Sector B, Figure 3-1 shows about 2 feet of black spongy sediment underlain by about 5 feet of clay and silt. The clay and silt are not present in Site L because it was probably excavated. Underlying the clay and silt are the fine sands and silt of the Cahokia Alluvium. Present at Site L and the surrounding area is a 3 to 8 foot thick layer of fill consisting chiefly of black cinders, brick fragments, and sand and gravel.

A similar sequence of black spongy sediment overlying a clay and silt unit is present in Sector B, adjacent to Site M. However, the clay and silt unit is not as thick (Figure 3-2). Site M shows about 10 feet of water in the middle of the pond, which is underlain by about 1 to 2 feet of black spongy sediment.

Results of sediment thickness measurements at Site M are shown on Figure 2-4. Sediment thickness varies from 0.5 to 3 feet in the northern and eastern parts of Site M to 1.0 to 5.5 feet in the southern and western parts of Site M (closer to Dead Creek). Sediment thickness at sample location M-3 was estimated to be 8 feet. A split-spoon sampler was driven into the underlying sand at that time, and it is believed that the top of the sand was miscalculated. A follow-up thickness measurement indicated that the sediment is about 5- to 5.5 feet thick. The average sediment thickness across all of Site M is 1.6 feet.

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Cross section C-C' (Figure 3-3) illustrates that the sediment thickness in the southwestern part of Site M is significantly greater than throughout the remainder of the site. This may be due to a suspended sediment load from Dead Creek which may be deposited upon entering Site M.

4.0 ANALYTICAL RESULTS

In this section, the analytical results for each of the study areas is discussed. An inventory of all samples collected and analyses performed is provided in Table 2-1. A summary of TCL/TAL analytical results for each constituent detected is provided in Tables 4-1 through 4-4. The VOC and SVOC data are given in Tables 4-1 and 4-2, respectively. Pesticide/PCB results are provided in Table 4-3, and inorganic parameters data are provided in Table 4-4. A summary of the Resource Conservation Recovery Act (RCRA) hazardous characteristic parameters is provided in Table 4-5, and the laboratory results are included in Appendix D.

In accordance with the Quality Assurance Project Plan (QAPP) (Geraghty & Miller, Inc., 1991), a stringent review of the analytical data was conducted with respect to sample receipt and handling, analytical methods, data reporting deliverables, and document control. Data validation was performed on 10 percent of the samples and the remaining samples were screened for completion and technical compliance. The results of the data validation are provided in Appendix E.

QA/QC equipment blanks, which consisted of rinse water collected from decontaminated sample core barrels, indicate that the sediment/fill analytical results were not adversely affected by decontamination procedures.

4.1 DEAD CREEK SECTOR B

Eight VOCs were detected in sediment samples obtained from Dead Creek Sector B (see Table 4-1). Carbon disulfide and chlorobenzene are the two most common VOCs observed, although carbon disulfide is often a laboratory artifact. Carbon disulfide ranged in concentration from 0.008 milligrams per kilogram (mg/kg) at Boring C-B1 to 0.063 mg/kg at Boring A-B1. Chlorobenzene concentrations ranged from 0.092 mg/kg (Boring G-B1) to 13 mg/kg (Boring J-B2).

Thirty-two SVOCs were detected in Sector B sediment samples (see Table 4-2). The highest SVOC concentrations were observed in the northern section of Sector B at Profile A. Sixteen SVOCs were detected above 1 mg/kg in Boring A-B1, with the highest concentration reported for benzo(b)fluoranthene (30 mg/kg).

There were no pesticides detected in any of the sediment samples collected in Sector B. PCBs (Aroclor 1248, 1254, and 1260) were detected in most samples collected (see Table 4-3). Total PCB concentrations ranged from not detected in several samples to 440 mg/kg in Boring C-B1. PCB concentrations are significantly lower in sediment samples obtained from below a depth of 2 feet, in some cases by as much as three orders of magnitude. For example, in Profile A, total PCBs were reported at 310 mg/kg in Boring A-B1 (0 to 2 feet below grade); at 0.376 mg/kg in Boring A-B2 (2 to 4 feet below grade); and at 0.130 mg/kg in Boring A-B3 (5 to 6 feet below grade). Figure 2-1 provides a schematic diagram of Profile A sampling depths. PCB concentrations in the uppermost 2-foot interval ranged from 53 mg/kg at Profile I to 440 mg/kg at Profile C. In the 2- to 4-foot interval, PCB concentrations ranged from not detected (Profiles D, E, and F) to 0.4 mg/kg at Profile G. Samples collected from the 4- to 6-foot interval exhibited the lowest concentrations of PCBs, ranging from not detected (Profiles B, D, E, F, H, and J) to 1.3 mg/kg (Profile G).

In the absence of background metals data for Sauget sediment, metals results were evaluated by comparing site concentrations to those typical of pedalfers (soil type common to humid regions), as reported by the U.S. Geological Survey (Shacklette and Boerngen, 1984). Background sediment samples were not obtained from Dead Creek because it is suspected that all of Dead Creek may have been affected by past activities in the area. The following metals were detected above the range of concentrations in Sector B that are typical of humid region soils in the United States: antimony, arsenic, barium, copper, lead, mercury, nickel, selenium, and zinc (Table 4-6).

Analytical results for the TCLP, ignitability, reactivity, and corrosivity tests indicate that constituents in sediment are within the RCRA regulatory limits (Table 4-5). However,

PCB concentrations exceeded 50 mg/kg for 10 of the 30 samples collected and, therefore, are regulated in accordance with the Toxic Substances Control Act (TSCA). Each result above 50 mg/kg occurred for samples collected in the upper 2 feet of sediment in Sector B. The volume of material in the upper 2 feet of Sector B is estimated to be 89,850 cubic feet or 3,330 cubic yards.

4.2 SITE L

Five VOCs were detected in sediment/fill samples from Site L (see Table 4-1). Chlorobenzene was the only VOC detected in all six Site L samples and concentrations ranged from 0.012 to 5.3 mg/kg. Thirty-one SVOCs were detected in Site L samples. Sample L1 was collected from the center of the site and the highest concentrations were reported from 3 to 8 feet below grade for 1,2,4-trichlorobenzene (79 mg/kg) and 1,4-dichlorobenzene (100 mg/kg).

Pesticides were not detected in any of the Site L samples. PCBs were detected in both samples submitted for analysis. Total PCBs were reported to be 500 mg/kg in sample L1 (3 to 8 feet below grade) and 16 mg/kg in sample L1 (8 to 14 feet below grade) (see Table 4-3).

Arsenic and zinc are the only two metals detected at Site L above the range for background concentrations in soils for a humid environment (Shacklette and Boerngen, 1984). All the RCRA hazardous characterization parameters presented in Table 4-5, are within the regulatory limits for the Site L samples. PCBs were detected at 500 mg/kg in the fill sample collected at the 3 to 8 feet below grade from the center of Site L (see Table 4-3). The volume of PCB-impacted fill from 3 to 8 feet below grade at Site L cannot be determined because only one sample was collected in this zone.

4.3 SITE M

Chlorobenzene and ethylbenzene were the only two VOCs detected in the Site M sediment samples (see Table 4-1). VOCs were not detected in the surface-water sample collected from the south shore of Site M.

Twenty-three SVOCs were detected in Site M sediment (see Table 4-2) and the highest concentrations were reported for 1,2-dichlorobenzene (26 mg/kg) and 1,4-dichlorobenzene (40 mg/kg). Benzoic acid was the only SVOC detected in Site M surface water at a concentration of 3 micrograms per liter (ug/L).

Pesticides were not detected in any of the Site M samples (see Table 4-5). PCBs were present in all Site M samples, and ranged in concentration from 14.9 to 505 mg/kg (see Table 4-3). Neither pesticides nor PCBs were detected in the Site M surface-water sample.

The following metals were detected in sediment at Site M above the range of concentrations typically found in soils associated with a humid climate: antimony, arsenic, barium, copper, lead, nickel, and zinc (see Tables 4-4 and 4-6). These constituents have been reported in sediments in Sector B (Table 4-4). It is likely that elevated metals in Site M sediment were transported from Dead Creek due to fluvial processes. No constituents were detected in the surface-water sample at Site M above the federal primary drinking water standards.

None of the RCRA hazardous characteristic parameters was present above the regulatory limit in the Site M sediment (Table 4-5). Profile thickness measurements at Site M indicate that approximately 96,500 cubic feet (3,600 cubic yards) of sediment have been impacted by PCBs.

5.0 SUMMARY OF FINDINGS

A summary of the findings for Geraghty & Miller's investigation of the Dead Creek Sector B and Sites L and M, in Sauget-Cahokia, Illinois is presented below.

1. TCL/TAL parameters are present in sediment/fill at Dead Creek Sector B, Site L, and Site M, but are not above regulatory limits under RCRA hazardous characteristics classification as determined by TCLP analysis.

2. Metals in creek sediment were detected above regional background concentrations in Sector B and Site M. The presence of some elevated metals in Site M is likely due to the transport of sediment from Sector B into Site M.

3. PCBs are present at each site above the TSCA standard of 50 mg/kg.

4. At Dead Creek Sector B (south of the no access area), about 89,850 cubic feet (3,330 cubic yards) of sediment have been impacted by PCBs.

5. At Site M, about 96,500 cubic feet (3,600 cubic yards) of sediment have been impacted by PCBs.

6. At Site L, fill has also been impacted by PCBs; however, the volume of material cannot be quantified because only one sample was collected from the zone in which PCBs were detected.

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Table 2-1. Inventory of Sample Locations and Analyses for Dead Creek Sector B and Sites L and M, Sauget-Cahokia, Illinois.

Sample Designation	Depth (feet below grade)	TCL VOCs	TCL SVOCs	TCL Pesticides/PCBs	TAL Metals and Cyanide	TAL Metals	TCL PCBs	TCLP Composite
Dead Creek - Sector B								
PA-B1	0-2	X	X	X	X			X
PA-B2	2-4					X	X	X
PA-B3	5-6					X	X	X
PB-B1	0-2	X	X	X	X			X
PB-B2	4-6					X	X	X
PB-B3	2-4					X	X	X
PC-B1	0-1.5	X	X	X	X			X
PC-B2	1.5-3.5					X	X	X
PC-B3	3.5-5.5					X	X	X
PD-B1	0-1.5	X	X	X	X			X
PD-B2	2-4					X	X	X
PD-B3	4-6					X	X	X
PE-B1	0-2	X	X	X	X			X
PE-B2	4-6					X	X	X
PE-B3	2-4					X	X	X
PF-B1	0-2	X	X	X	X			X
PF-B2	2-4					X	X	X
PF-B3	4-6					X	X	X
PG-B1	0-2	X	X	X	X			X
PG-B2	2-4					X	X	X
PG-B3	4-6					X	X	X
PH-B1	0-2	X	X	X	X			X
PH-B2	2-4					X	X	X
PH-B3	4-6					X	X	X

See page 2 for footnotes.

Table 2-1. Inventory of Sample Locations and Analyses for Dead Creek Sector B and Sites L and M, Sauget-Cahokia, Illinois.

Sample Designation	Depth (feet below grade)	TCL VOCs	TCL SVOCs	TCL Pesticides/PCBs	TAL Metals and Cyanide	TAL Metals	TCL PCBs	TCLP Composite
PI-B1	3-5					X	X	X
PI-B2	0-2	X	X	X	X			X
PI-B3	1.5-3					X	X	X
PJ-B1	3-5					X	X	X
PJ-B2	0-1.5	X	X	X	X			X
PJ-B3	1.5-3					X	X	X
Site M								
M1	0-3					X	X	X
M2	0-3.5					X	X	X
M3	0-8	X	X	X	X			X
M1A	0-1						X	
M2A	0-1						X	
M3A	0-1						X	
M4A	0-1	X	X				X	
M5A	0-1						X	
M6A	0-1						X	
M7A	0-1						X	
South Shore	Surface Water	X	X	X	X	X		
Site L								
L1 (LB-16/LB-17)	3-8	X	X	X	X			X
L1 (LB-17)	8-14	X	X	X	X			X
L2 (LB-13)	8-10	X	X		X			
L3 (LB-14)	9-11	X	X		X			
L4 (LB-12)	8-10	X	X		X			
L5 (LB-10)	7-8.5	X	X		X			
Equipment Blanks (Sector B and Sites L & M)		X	X	X	X	X	X	

P Profile designation.
B Boring designation.
X Laboratory analysis conducted.
- - - - - - TCLP composite grouping.

TCL Target compound list.
VOCs Volatile organic compounds.
SVOCs Semivolatile organic compounds.
TAL Target analyte list.
PCBs Polychlorinated biphenyls.
TCLP Toxicity characteristic leaching procedure. (Note: Also includes reactivity, corrosivity, and ignitability.)

Table 4-1. Summary of Volatile Compounds Detected for Dead Creek Sector B and Sites L and M, Sauget-Cahokia, Illinois.

Sample Location:	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek
Sample Identification:	A-B1	B-B1	C-B1	D-B1	E-B1	F-B1	G-B1
Sample Depth:	0-2 ft	0-2 ft	0-1.5 ft	0-1.5 ft	0-2 ft	0-2 ft	0-2 ft
Sample Date:	10/18/91	10/18/91	10/21/91	10/21/91	10/21/91	10/22/91	10/22/91
Units:	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Parameters							
Methylene chloride	<0.028 J	<1.3 J	<0.047 J	<0.094 J	<0.064	<0.061	<0.019
Acetone	<0.056 J	<1.8 J	<0.43 J	1.7 J	<0.89	<0.35	<0.14
Carbon disulfide	0.063 J	<0.92 J	0.008 J	0.027 J	0.019 J	0.013 J	0.013 J
2-Butanone	<0.056 J	<3.7 J	<0.094 J	<0.23 J	<0.13	<0.18	<0.081
Benzene	<0.028 J	<0.92 J	<0.047 J	<0.049 J	<0.064	<0.061	<0.013
Tetrachloroethene	<0.028 J	<0.92 J	<0.047 J	<0.049 J	<0.064	0.030 J	<0.013
Toluene	<0.028 J	5.3 J	<0.047 J	<0.049 J	0.035 J	0.025 J	<0.013
Chlorobenzene	0.99 DJ	2.0 J	0.990 J	1.8 J	0.44	1.1	0.092
Ethylbenzene	<0.028 J	<0.92 J	<0.047 J	<0.049 J	<0.064	0.044 J	0.008 J
Xylenes	<0.028 J	0.36 J	<0.047 J	0.040 J	<0.064	<0.061	<0.013
Chloroform	<0.028 J	<0.92 J	<0.047 J	<0.049 J	<0.064	<0.061	<0.013
1,1,1-Trichloroethane	<0.028 J	<0.92 J	<0.047 J	<0.049 J	<0.064	<0.061	<0.013

mg/kg	Milligrams per kilogram.
dw	Dry weight.
ug/L	Micrograms per liter.
J	Estimated value.
D	Compound concentration was determined at a secondary dilution factor.

Table 4-1. Summary of Volatile Compounds Detected for Dead Creek Sector B and Sites L and M, Sauget-Cahokia, Illinois.

Sample Location:	Dead Creek	Dead Creek	Dead Creek	Site L	Site L	Site L	Site L
Sample Identification:	H-B1	I-B2	J-B2	L1 (LB-16/LB-17)	L1 (LB-17)	L2 (LB-13)	L3 (LB-14)
Sample Depth:	0-2 ft	0-2 ft	0-1.5 ft	3-8 ft	8-14 ft	8-10 ft	9-11 ft
Sample Date:	10/23/91	10/24/91	10/24/91	10/16/91	10/16/91	10/15/91	10/16/91
Units:	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Parameters							
Methylene chloride	<0.050	<0.037	<0.016 J	<0.89 J	<3.1 J	<16 J	<0.007 J
Acetone	<0.27	0.29	0.24 J	<1.3 J	<5.8 J	<32 J	0.015 J
Carbon disulfide	0.010 J	0.011 J	0.035 J	<0.63 J	<2.9 J	<16 J	<0.007 J
2-Butanone	<0.20	0.20	<0.031 J	<1.3 J	<5.8 J	<32 J	<0.023 J
Benzene	<0.050	<0.030	<0.016 J	<0.63 J	<2.9 J	5.7 J	<0.007 J
Tetrachloroethene	<0.050	<0.030	<0.016 J	<0.63 J	<2.9 J	<16 J	<0.007 J
Toluene	0.069	<0.030	<0.016 J	4.5 J	32 J	400 J	<0.007 J
Chlorobenzene	0.71	0.65	13 DJ	5.3 J	0.90 J	3.6 J	0.066 J
Ethylbenzene	0.015 J	<0.030	<0.016 J	<0.63 J	<2.9 J	<16 J	<0.007 J
Xylenes	<0.050	<0.030	0.044 J	0.54 J	<2.9 J	11 J	<0.007 J
Chloroform	<0.050	<0.030	<0.016 J	<0.63 J	<2.9 J	<16 J	<0.007 J
1,1,1-Trichloroethane	<0.050	<0.030	<0.016 J	<0.63 J	<2.9 J	<16 J	<0.007 J

mg/kg Milligrams per kilogram.
dw Dry weight.
ug/L Micrograms per liter.
J Estimated value.
D Compound concentration was determined at a secondary dilution factor.

Table 4-1. Summary of Volatile Compounds Detected for Dead Creek Sector B and Sites L and M, Sauget-Cahokia, Illinois.

Sample Location:	Site L	Site L	Site M	Site M	Site M	Dead Creek	Site L
Sample Identification:	L4 (LB-12)	L5 (LB-10)	M3	M-4A	South Shore	Equipment	Equipment
Sample Depth:	8-10 ft	7-8.5 ft	0-8 ft	0-1 ft	Surface Water	Blank	Blank
Sample Date:	10/15/91	10/15/91	11/5/91	1/7/92	1/8/92	10/21/91	10/16/91
Units:	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	ug/L	ug/L	ug/L
Parameters							
Methylene chloride	<0.006 J	<0.007 J	<2.2 J	<2.6 J	<5.0	10	<5.0
Acetone	<0.013 J	<0.014 J	<4.5 J	<52 J	<100	<10	<10
Carbon disulfide	<0.006 J	<0.007 J	<2.2 J	<2.6 J	<5.0	<5.0	<5.0
2-Butanone	<0.013 J	<0.028 J	<4.5 J	<52 J	<100	<10	<10
Benzene	<0.006 J	<0.007 J	<2.2 J	<2.6 J	<5.0	<5.0 J	<5.0 J
Tetrachloroethene	<0.006 J	<0.007 J	<2.2 J	<2.6 J	<5.0	<5.0	<5.0
Toluene	<0.006 J	<0.007 J	<2.2 J	<2.6 J	<5.0	<5.0 J	<5.0 J
Chlorobenzene	0.012 J	0.030 J	10 J	<2.6 J	<5.0	<5.0 J	<5.0 J
Ethylbenzene	<0.006 J	<0.007 J	0.82 J	<2.6 J	<5.0	<5.0 J	<5.0 J
Xylenes	<0.006 J	<0.007 J	<2.2 J	<2.6 J	<5.0	<5.0 J	<5.0 J
Chloroform	<0.006 J	<0.007 J	<2.2 J	<2.6 J	<5.0	<5.0 J	<5.0 J
1,1,1-Trichloroethane	<0.006 J	<0.007 J	<2.2 J	<2.6 J	<5.0	<5.0 J	<5.0 J

mg/kg Milligrams per kilogram.
dw Dry weight.
ug/L Micrograms per liter.
J Estimated value.
D Compound concentration was determined at a secondary dilution factor.

Table 4-1. Summary of Volatile Compounds Detected for Dead Creek Sector B and Sites L and M, Sauget-Cahokia, Illinois.

Sample Location:	Site M
Sample Identification:	Equipment
Sample Depth:	Blank
Sample Date:	11/5/91
Units:	ug/L
Parameters	
Methylene chloride	1.0 J
Acetone	< 10
Carbon disulfide	<5.0
2-Butanone	< 10
Benzene	<5.0 J
Tetrachloroethene	<5.0
Toluene	<5.0 J
Chlorobenzene	<5.0 J
Ethylbenzene	<5.0 J
Xylenes	<5.0 J
Chloroform	21
1,1,1-Trichloroethane	2.0 J

mg/kg	Milligrams per kilogram.
dw	Dry weight.
ug/L	Micrograms per liter.
J	Estimated value.
D	Compound concentration was determined at a secondary dilution factor.

Table 4-2. Summary of Semivolatile Compounds Detected for Dead Creek-Sector B and Sites L and M, Sauget-Cahokia, Illinois.

Sample Location:	Dead Creek	Dead Creek	Dead Creek	Dead Creek
Sample Identification:	A-B1*	B-B1*	C-B1	D-B1
Sample Depth:	0-2 ft	0-2 ft	0-1.5 ft	0-1.5 ft
Sample Date:	10/18/91	10/18/91	10/21/91	10/21/91
Units:	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Parameters				
Phenol	<6.2	<0.490	<12	<0.650
2-Chlorophenol	<6.2	0.460 J/<0.490	<12	0.150 J
1,3-Dichlorobenzene	0.650 J/0.690 J	0.180 J/0.180 J	<12	0.350 J
1,4-Dichlorobenzene	1.9 J/2.0 J	2.3/2.0	1.8 J	1.7
1,2-Dichlorobenzene	0.850 J/0.960 J	<0.490	<12	1.2
4-Methylphenol	<6.2	<0.490	<12	<0.650
Isophorone	<6.2	<0.490	<12	<0.650
2,4-Dimethylphenol	<6.2	<0.490	<12	<0.650
2,4-Dichlorophenol	<6.2	0.840/0.880	<12	<0.650
1,2,4-Trichlorobenzene	<6.2/3.4 J	1.6/1.6	3.8 J	3.4
Naphthalene	<5.4/ 5.1 J	1.1/1.0	<12	0.350 J
4-Chloroaniline	<6.2	<0.490	<12	<0.650
2-Methylnaphthalene	1.8 J/1.7 J	<0.490	<12	0.240 J
2,4,6-Trichlorophenol	<6.2	1.3/1.4	<12	<0.650
2,4,5-Trichlorophenol	<31	<2.5	<62	<3.300
Acenaphthylene	0.720 J/0.960 J	<0.490	<12	<0.650
Acenaphthene	0.530 J/0.440 J	0.230 J/0.270 J	<12	0.430 J
Dibenzofuran	1.2 J/1.3 J	0.160 J/0.170 J	<12	0.350 J
Diethylphthalate	<6.2	<0.490	<12	<0.650
Fluorene	1.5 J/1.6 J	0.340 J/0.310 J	<12	0.950
N-Nitrosodiphenylamine	<6.2	0.520/0.760	<12	<0.650
Hexachlorobenzene	<6.2	<0.490	<12	<0.650
Pentachlorophenol	<31	1.4 J/2.9	<62	1.5 J
Phenanthrene	6.4/6.4	0.870/<0.490	1.6 J	0.900
Anthracene	1.7 J/1.8 J	0.430 J/<0.490	<12	0.370 J
Di-n-butylphthalate	<6.2	<0.490	<12	<0.650
Fluoranthene	5.4 J/5.4 J	1.8/<0.490	3.2 J	0.840
Pyrene	7.5/7.3	6.6/4.3	5.6 J	3.4
Butylbenzylphthalate	<6.2	<0.490	<12	<0.650
Benzo(a)anthracene	3.7 J/3.6 J	1.6/1.8	1.6 J	0.950
bis(2-Ethylhexyl)phthalate	12 B/10 B	2.4 B/1.9 B	7.1 J	1.3
Chrysene	9.4/8.1	1.7/1.2	2.5 J	1.3
Benzo(b)fluoranthene	30/23	2.7/4.0	2.7 J	2.1
Benzo(k)fluoranthene	15/13	1.9/<0.490	3.2 J	1.1
Benzo(a)pyrene	10/8.7	1.9/1.9	2.3 J	1.2
Indeno(1,2,3-cd)pyrene	9/8.6	0.7/1.0	<12	0.730
Dibenzo(a,h)anthracene	3.9 J/3.3 J	<0.490	<12	<0.650
Benzo(g,h,i)perylene	12/13	0.650/1.0	1.5 J	1.1
Benzoic acid				

*	This sample was analyzed twice.
mg/kg	Milligrams per kilogram.
dw	Dry weight.
ug/L	Micrograms per liter.
J	Estimated value.
B	The compound was detected in the associated method blank.
E	Compound concentration exceeded the calibration range of the instrument.
D	Compound concentration is at a secondary dilution factor.

Table 4-2. Summary of Semivolatile Compounds Detected for Dead Creek-Sector B and Sites L and M, Sauget-Cahokia, Illinois.

Sample Location:	Dead Creek	Dead Creek	Dead Creek	Dead Creek
Sample Identification:	E-B1	F-B1	G-B1	H-B1
Sample Depth:	0-2 ft	0-2 ft	0-2 ft	0-2 ft
Sample Date:	10/21/91	10/22/91	10/22/91	10/23/91
Units:	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Parameters				
Phenol	<0.850	<0.810	<0.860	<0.660
2-Chlorophenol	0.120 J	0.110 J	<0.860	<0.660
1,3-Dichlorobenzene	0.760 J	1.100	<0.860	0.410 J
1,4-Dichlorobenzene	1.6	5.7	0.110 J	1.3
1,2-Dichlorobenzene	1.7	11	<0.860	2.5
4-Methylphenol	<0.850	<0.810	<0.860	0.120 J
Isophorone	<0.850	0.270 J	<0.860	<0.660
2,4-Dimethylphenol	<0.850	0.140 J	<0.860	0.087 J
2,4-Dichlorophenol	0.340 J	0.250 J	<0.860	0.096 J
1,2,4-Trichlorobenzene	4.4	12	<0.860	2.3
Naphthalene	0.300 J	0.500 J	<0.860	0.210 J
4-Chloroaniline	<0.850	<0.810	<0.860	<0.660
2-Methylnaphthalene	0.100 J	0.320 J	<0.860	0.140 J
2,4,6-Trichlorophenol	0.350 J	<0.810	<0.860	<0.660
2,4,5-Trichlorophenol	0.096 J	<4.1	<4.3	<3.3
Acenaphthylene	<0.850	<0.810	<0.860	<0.660
Acenaphthene	<0.850	0.480 J	<0.860	<0.660
Dibenzofuran	<0.850	0.280 J	<0.860	<0.660
Diethylphthalate	<0.850	<0.810	<0.860	<0.660
Fluorene	0.170 J	0.880	<0.860	0.120 J
N-Nitrosodiphenylamine	<0.850	<0.810	<0.860	<0.660
Hexachlorobenzene	0.110 J	<0.810	<0.860	<0.660
Pentachlorophenol	1.6 J	1.6 J	<4.3	0.390 J
Phenanthrene	0.410 J	1.7	<0.860	0.350 J
Anthracene	0.130 J	1.3	<0.860	<0.660
Di-n-butylphthalate	<0.850	<0.810	<0.860	<0.660
Fluoranthene	0.880	5.2	<0.860	0.430 J
Pyrene	2.5	16 E	<0.860	1.2
Butylbenzylphthalate	<0.850	<0.810	<0.860	<0.660
Benzo(a)anthracene	0.480 J	5.4	<0.860	0.360 J
bis(2-Ethylhexyl)phthalate	1.2	0.820	0.086 J	0.910
Chrysene	0.840 J	4.7	<0.860	0.510 J
Benzo(b)fluoranthene	1.1	5.6	<0.860	0.770
Benzo(k)fluoranthene	0.670 J	5.2	<0.860	0.780
Benzo(a)pyrene	0.550 J	5.3	0.170 J	0.680
Indeno(1,2,3-cd)pyrene	0.270 J	2.1	<0.860	0.460 J
Dibenzo(a,h)anthracene	<0.850	<0.810	<0.860	<0.660
Benzo(g,h,i)perylene	0.380 J	2.1	<0.860	0.330 J
Benzoic acid				

*	This sample was analyzed twice.
mg/kg	Milligrams per kilogram.
dw	Dry weight.
ug/L	Micrograms per liter.
J	Estimated value.
B	The compound was detected in the associated method blank.
E	Compound concentration exceeded the calibration range of the instrument.
D	Compound concentration is at a secondary dilution factor.

Table 4-2. Summary of Semivolatile Compounds Detected for Dead Creek-Sector B and Sites L and M, Sauget-Cahokia, Illinois.

Sample Location:	Dead Creek	Dead Creek	Site L	Site L
Sample Identification:	I-B2	J-B2*	L1* (LB-16/LB-17)	L1* (LB-17)
Sample Depth:	0-2 ft	0-1.5 ft	3-8 ft	8-14 ft
Sample Date:	10/24/91	10/24/91	10/16/91	10/16/91
Units:	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Parameters				
Phenol	<0.660	<1	13	13
2-Chlorophenol	<0.660	<1	<3.3	<3.8
1,3-Dichlorobenzene	<0.660	2	4.3	<3.8
1,4-Dichlorobenzene	1.1	12	93 E/100 D	3.2 J
1,2-Dichlorobenzene	<0.660	<1	7.7	2.9 J
4-Methylphenol	<0.660	<1	3.2 J	5.5
Isophorone	<0.660	<1	<3.3	<3.8
2,4-Dimethylphenol	<0.660	<1	<3.3	<3.8
2,4-Dichlorophenol	<0.660	<1	2.4 J	<3.8
1,2,4-Trichlorobenzene	0.380 J	<1	73 E/79 D	5.5
Naphthalene	0.190 J	2.1	7.3	<3.8
4-Chloroaniline	<660	<1	13	270 E/260 D
2-Methylnaphthalene	<0.660	7	2.3 J	1.6 J
2,4,6-Trichlorophenol	<0.660	<1	1.5 J	<3.8
2,4,5-Trichlorophenol	<3.3	<5.1	<17	<19.000
Acenaphthylene	<0.660	<1	0.280 J	<3.8
Acenaphthene	0.098 J	2.6	3.1 J	<3.8
Dibenzofuran	0.070 J	2	3 J	<3.8
Diethylphthalate	<0.660	<1	1 J	<3.8
Fluorene	0.150 J	4.6	5	<3.8
N-Nitrosodiphenylamine	<0.660	<1	<3.3	<3.8
Hexachlorobenzene	<0.660	<1	4.8	<3.8
Pentachlorophenol	0.320 J	<5.1	28	29
Phenanthrene	0.320 J	2.9	23	<3.8
Anthracene	<0.660	2.7	4.2	<3.8
Di-n-butylphthalate	<0.660	<1	1.8 J	<3.8
Fluoranthene	0.580 J	4.7	16	<3.8
Pyrene	1.9	17 E/12 D	23	<3.8
Butylbenzylphthalate	<0.660	<1	5.4	<3.8
Benzo(a)anthracene	0.700	5	8.6	<3.8
bis(2-Ethylhexyl)phthalate	<0.660	<1	<3.3	<3.8
Chrysene	1.2	7	8.2	<3.8
Benzo(b)fluoranthene	1.6	6.1	5.4	<3.8
Benzo(k)fluoranthene	0.980	5	4.6	<3.8
Benzo(a)pyrene	0.900	4.4	5.3	<3.8
Indeno(1,2,3-cd)pyrene	0.700	2.8	2.9 J	<3.8
Dibenzo(a,h)anthracene	<0.660	<1	<3.3	<3.8
Benzo(g,h,i)perylene	0.880	3.2	3.2 J	<3.8
Benzoic acid				

*	This sample was analyzed twice.
mg/kg	Milligrams per kilogram.
dw	Dry weight.
ug/L	Micrograms per liter.
J	Estimated value.
B	The compound was detected in the associated method blank.
E	Compound concentration exceeded the calibration range of the instrument.
D	Compound concentration is at a secondary dilution factor.

Table 4-2. Summary of Semivolatile Compounds Detected for Dead Creek-Sector B and Sites L and M, Sauget-Cahokia, Illinois.

Sample Location:	Site L	Site L	Site L	Site L
Sample Identification:	L2 (LB-13)	L3* (LB-14)	L4 (LB-12)	L5 (LB-10)
Sample Depth:	8-10 ft	9-11 ft	8-10 ft	7-8.5 ft
Sample Date:	10/15/91	10/16/91	10/15/91	10/15/91
Units:	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Parameters				
Phenol	16	<0.460	<0.42	<0.45
2-Chlorophenol	2.6 J	<0.460/0.013 J	<0.42	<0.45
1,3-Dichlorobenzene	<4.2	<0.460	<0.42	<0.45
1,4-Dichlorobenzene	13	0.028 J/0.018 J	<0.42	<0.45
1,2-Dichlorobenzene	3.4 J	<0.460/0.010 J	<0.42	<0.45
4-Methylphenol	7.1	<0.460	<0.42	<0.45
Isophorone	<4.2	<0.460	<0.42	<0.45
2,4-Dimethylphenol	<4.2	<0.460	<0.42	<0.45
2,4-Dichlorophenol	11	<0.460	<0.42	<0.45
1,2,4-Trichlorobenzene	<4.2	<0.460	<0.42	<0.45
Naphthalene	<4.2	<0.460/0.096 J	<0.42	<0.45
4-Chloroaniline	49	0.320 J/0.043 J	<0.42	<0.45
2-Methylnaphthalene	3.1 J	<0.460/0.021 J	<0.42	<0.45
2,4,6-Trichlorophenol	<4.2	<0.460	<0.42	<0.45
2,4,5-Trichlorophenol	<21	<2.3	<2.1	<2.3
Acenaphthylene	<4.2	<0.460	<0.42	<0.45
Acenaphthene	<4.2	<0.460/0.083 J	<0.42	<0.45
Dibenzofuran	<4.2	<0.460/0.042 J	<0.42	<0.45
Diethylphthalate	<4.2	<0.460	<0.42	<0.45
Fluorene	<4.2	<0.460/0.079 J	<0.42	<0.45
N-Nitrosodiphenylamine	<4.2	<0.460	<0.42	<0.45
Hexachlorobenzene	<4.2	<0.460	<0.42	<0.45
Pentachlorophenol	<21	<2.3	<2.1	<2.3
Phenanthrene	<4.2	0.091 J/0.420 J	<0.42	<0.45
Anthracene	<4.2	0.028 J/0.150 J	<0.42	<0.45
Di-n-butylphthalate	<4.2	<0.460	<0.42	<0.45
Fluoranthene	<4.2	0.130 J/0.520	<0.42	<0.45
Pyrene	<4.2	0.130 J/0.420 J	<0.42	<0.45
Butylbenzylphthalate	<4.2	<0.460	<0.42	<0.45
Benzo(a)anthracene	<4.2	0.075 J/0.260 J	<0.42	<0.45
bis(2-Ethylhexyl)phthalate	<4.2	2.2 B/<0.450	0.017 BJ	0.044 BJ
Chrysene	<4.2	0.076 J/0.300 J	<0.42	<0.45
Benzo(b)fluoranthene	<4.2	0.058 J/0.190 J	<0.42	<0.45
Benzo(k)fluoranthene	<4.2	<0.460/0.190 J	<0.42	<0.45
Benzo(a)pyrene	<4.2	0.070 J/0.220 J	<0.42	<0.45
Indeno(1,2,3-cd)pyrene	<4.2	<0.460/0.110 J	<0.42	<0.45
Dibenzo(a,h)anthracene	<4.2	<0.460/0.027 J	<0.42	<0.45
Benzo(g,h,i)perylene	<4.2	<0.460/0.049 J	<0.42	<0.45
Benzoic acid				

* This sample was analyzed twice.
mg/kg Milligrams per kilogram.
dw Dry weight.
ug/L Micrograms per liter.
J Estimated value.
B The compound was detected in the associated method blank.
E Compound concentration exceeded the calibration range of the instrument.
D Compound concentration is at a secondary dilution factor.

Table 4-2. Summary of Semivolatile Compounds Detected for Dead Creek-Sector B and Sites L and M, Sauget-Cahokia, Illinois.

Sample Location:	Site M	Site M	Site M	Dead Creek
Sample Identification:	M3	M-4A	South Shore	Equipment
Sample Depth:	0-8 ft	0-1 ft	Surface Water	Blank
Sample Date:	11/5/91	1/7/92	1/8/92	10/21/91
Units:	mg/kg dw	mg/kg dw	ug/L	ug/L
Parameters				
Phenol	<12	<14	<10	<10
2-Chlorophenol	<12	<14	<10	<10
1,3-Dichlorobenzene	4.1 J	2.3 J	<10	<10
1,4-Dichlorobenzene	40	27	<10	<10
1,2-Dichlorobenzene	26	3.3 J	<10	<10
4-Methylphenol	<12	<14	<10	<10
Isophorone	<12	<14	<10	<10
2,4-Dimethylphenol	<12	<14	<10	<10
2,4-Dichlorophenol	<12	<14	<10	<10
1,2,4-Trichlorobenzene	14	5 J	<10	<10
Naphthalene	3.3 J	2.6 J	<10	<10
4-Chloroaniline	<12	<14	<10	<10
2-Methylnaphthalene	6.9 J	1.6 J	<10	<10
2,4,6-Trichlorophenol	<12	<14	<10	<10
2,4,5-Trichlorophenol	<59	<14	<10	<50
Acenaphthylene	<12	<14	<10	<10
Acenaphthene	<12	1.5 J	<10	<10
Dibenzofuran	<12	2.1 J	<10	<10
Diethylphthalate	<12	<14	<10	<10
Fluorene	5.2 J	5.9 J	<10	<10
N-Nitrosodiphenylamine	<12	<14	<10	<10
Hexachlorobenzene	<12	<14	<10	<10
Pentachlorophenol	<59	<69	<50	<50
Phenanthrene	11 J	13 J	<50	<10
Anthracene	2.5 J	3.9 J	<50	<10
Di-n-butylphthalate	<12	<14	<50	<10
Fluoranthene	21	21	<50	<10
Pyrene	23	27	<50	<10
Butylbenzylphthalate	<12	1.6 J	<50	<10
Benzo(a)anthracene	9.4 J	9.2	<50	<10
bis(2-Ethylhexyl)phthalate	18 B	<14	<50	<10
Chrysene	12	9.9 J	<50	<10
Benzo(b)fluoranthene	15	8.4 J	<50	<10
Benzo(k)fluoranthene	9.3 J	6.6 J	<50	<10
Benzo(a)pyrene	7.5 J	6.9 J	<50	<10
Indeno(1,2,3-cd)pyrene	3.7 J	4.3 J	<50	<10
Dibenzo(a,h)anthracene	1.2 J	<14	<50	<10
Benzo(g,h,i)perylene	6 J	6 J	<50	<10
Benzoic acid			3 J	

*	This sample was analyzed twice.
mg/kg	Milligrams per kilogram.
dw	Dry weight.
ug/L	Micrograms per liter.
J	Estimated value.
B	The compound was detected in the associated method blank.
E	Compound concentration exceeded the calibration range of the instrument.
D	Compound concentration is at a secondary dilution factor.

Table 4-2. Summary of Semivolatile Compounds Detected for Dead Creek-Sector B and Sites L and M, Sauget-Cahokia, Illinois.

Sample Location:	Site L	Site M
Sample Identification:	Equipment	Equipment
Sample Depth:	Blank	Blank
Sample Date:	10/16/91	11/5/91
Units:	ug/L	ug/L
Parameters		
Phenol	<10	<10
2-Chlorophenol	<10	<10
1,3-Dichlorobenzene	<10	<10
1,4-Dichlorobenzene	<10	<10
1,2-Dichlorobenzene	<10	<10
4-Methylphenol	<10	<10
Isophorone	<10	<10
2,4-Dimethylphenol	<10	<10
2,4-Dichlorophenol	<10	<10
1,2,4-Trichlorobenzene	<10	<10
Naphthalene	<10	<10
4-Chloroaniline	<10	<10
2-Methylnaphthalene	<10	<10
2,4,6-Trichlorophenol	<10	<10
2,4,5-Trichlorophenol	<10	<50
Acenaphthylene	<10	<10
Acenaphthene	<10	<10
Dibenzofuran	<10	<10
Diethylphthalate	<10	<10
Fluorene	<10	<10
N-Nitrosodiphenylamine	<10	<10
Hexachlorobenzene	<10	<10
Pentachlorophenol	<50	<50
Phenanthrene	<10	<10
Anthracene	<10	<10
Di-n-butylphthalate	<10	<10
Fluoranthene	<10	<10
Pyrene	<10	<10
Butylbenzylphthalate	<10	0.2 J
Benzo(a)anthracene	<10	<10
bis(2-Ethylhexyl)phthalate	1.0 J	<10
Chrysene	<10	<10
Benzo(b)fluoranthene	<10	<10
Benzo(k)fluoranthene	<10	<10
Benzo(a)pyrene	<10	<10
Indeno(1,2,3-cd)pyrene	<10	<10
Dibenzo(a,h)anthracene	<10	<10
Benzo(g,h,i)perylene	<10	<10
Benzoic acid		

*	This sample was analyzed twice.
mg/kg	Milligrams per kilogram.
dw	Dry weight.
ug/L	Micrograms per liter.
J	Estimated value.
B	The compound was detected in the associated method blank.
E	Compound concentration exceeded the calibration range of the instrument.
D	Compound concentration is at a secondary dilution factor.

Table 4-3. Summary of PCBs Detected for Dead Creek-Sector B and Sites L and M, Sauget-Cahokia, Illinois.

Parameters	Sample Location:	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek
	Sample Identification:	A-B1	A-B2	A-B3	B-B1	B-B3	B-B2	C-B1	C-B2
	Sample Depth:	0-2 ft	2-4 ft	5-6 ft	0-2 ft	2-4 ft	4-6 ft	0-1.5 ft	1.5-3.5 ft
	Sample Date:	10/18/91	10/18/91	10/18/91	10/18/91	10/18/91	10/18/91	10/21/91	10/21/91
	Units:	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Aroclor 1248		<150 J	0.250 J	<0.110 J	250 J	0.140 J	<0.110 J	440 J	0.420
Aroclor 1254		180 J	0.126 J	0.130 J	<230 J	<0.200 J	<0.220 J	<120 J	<0.250
Aroclor 1260		130 J	<0.230 J	<0.210 J	<230 J	<0.200 J	<0.220 J	<120 J	<0.250
Total PCBs:		**310**	**0.376**	**0.130**	**250**	**0.140**	**0**	**440**	**0.420**

mg/kg	Milligrams per kilogram.
dw	Dry weight.
ug/L	Micrograms per liter.
J	Estimated value.
X	Due to the presence of Aroclor 1248, 1254, and 1260, the quantitation is based on one peak only.
PCBs	Polychlorinated biphenyls.

Table 4-3. Summary of PCBs Detected for Dead Creek-Sector B and Sites L and M, Sauget-Cahokia, Illinois.

Sample Location:	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek
Sample Identification:	C-B3	D-B1	D-B2	D-B3	E-B1	E-B3	E-B2	F-B1
Sample Depth:	3.5-5.5 ft	0-1.5 ft	2-4 ft	4-6 ft	0.-2 ft	2-4 ft	4-6 ft	0-2 ft
Sample Date:	10/21/91	10/21/91	10/21/91	10/21/91	10/21/91	10/21/91	10/21/91	10/22/91
Units:	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Parameters								
Aroclor 1248	<0.120	85 J	<0.120	<0.110	68 J	<0.110	<0.110	92 J
Aroclor 1254	0.220 J	53 J	<0.240	<0.210	46 J	<0.230	<0.230	55 J
Aroclor 1260	<0.240	<63 J	<0.240	<0.210	<82 J	<0.230	<0.230	<78 J
Total PCBs:	**0.220**	**138**	**0**	**0**	**114**	**0**	**0**	**147**

mg/kg	Milligrams per kilogram.
dw	Dry weight.
ug/L	Micrograms per liter.
J	Estimated value.
X	Due to the presence of Aroclor 1248, 1254, and 1260, the quantitation is based on one peak only.
PCBs	Polychlorinated biphenyls.

Table 4-3. Summary of PCBs Detected for Dead Creek-Sector B and Sites L and M, Sauget-Cahokia, Illinois.

Sample Location:	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek
Sample Identification:	F-B2	F-B3	G-B1	G-B2	G-B3	H-B1	H-B2	H-B3
Sample Depth:	2-4 ft	4-6 ft	0-2 ft	2-4 ft	4-6 ft	0-2 ft	2-4 ft	4-6 ft
Sample Date:	10/22/91	10/22/91	10/22/91	10/23/91	10/23/91	10/23/91	10/23/91	10/23/91
Units:	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Parameters								
Aroclor 1248	<0.120	<0.110	20 J	<0.110	0.120	54 J	0.120	<0.120
Aroclor 1254	<0.250	<0.210	30 J	0.400	0.910	13 J	<0.220	<0.240
Aroclor 1260	<0.250	<0.210	42 J	<0.220	0.250	<32 J	<0.220	<0.240
Total PCBs:	0	0	92	0.400	1.280	67	0.120	0

mg/kg	Milligrams per kilogram.
dw	Dry weight.
ug/L	Micrograms per liter.
J	Estimated value.
X	Due to the presence of Aroclor 1248, 1254, and 1260, the quantitation is based on one peak only.
PCBs	Polychlorinated biphenyls.

Table 4-3. Summary of PCBs Detected for Dead Creek-Sector B and Sites L and M, Sauget-Cahokia, Illinois.

Sample Location:	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Site L	Site L
Sample Identification:	I-B2	I-B3	I-B1	J-B2	J-B3	J-B1	L1 (LB-16/LB-17)	L1 (LB-17)
Sample Depth:	0-2 ft	1.5-3 ft	3-5 ft	0-1.5 ft	1.5-3 ft	3-5 ft	3-8 ft	8-14 ft
Sample Date:	10/24/91	10/24/91	10/24/91	10/24/91	10/24/91	10/24/91	10/16/91	10/16/91
Units:	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Parameters								
Aroclor 1248	12 J	0.330	0.390	93 J	0.230	<0.120	120 J	<18 J
Aroclor 1254	18 J	0.680 X	0.230 X	110 J	0.350 X	<0.230	<310 J	<36 J
Aroclor 1260	23 J	0.370 J	0.210 J	98 J	0.200 J	<0.230	380 J	16 J
Total PCBs:	53	1.380	0.830	301	0.780	0	500	16

mg/kg	Milligrams per kilogram.
dw	Dry weight.
ug/L	Micrograms per liter.
J	Estimated value.
X	Due to the presence of Aroclor 1248, 1254, and 1260, the quantitation is based on one peak only.
PCBs	Polychlorinated biphenyls.

Table 4-3. Summary of PCBs Detected for Dead Creek-Sector B and Sites L and M, Sauget-Cahokia, Illinois.

Parameters	Sample Location:	Site M	Site M	Site M	Site M	Site M	Site M	Site M	Site M
	Sample Identification:	M1	M2	M3	M-1A	M-2A	M-3A	M-4A	M-5A
	Sample Depth:	0-3 ft	0-3.5 ft	0-8 ft	0-1 ft	0-1 ft	0-1 ft	0-1 ft	0-1 ft
	Sample Date:	11/5/91	11/5/91	11/5/91	1/7/92	1/7/92	1/7/92	1/7/92	1/7/92
	Units:	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Aroclor 1248		13	6.9	210	16	67	110	140	110
Aroclor 1254		8 X	4.2 X	81 J	31	77	63	120	110
Aroclor 1260		8.3	3.8	72 J	16	43	19 J	51	39
Total PCBs:		29.3	14.9	363	63	187	192	311	259

mg/kg	Milligrams per kilogram.
dw	Dry weight.
ug/L	Micrograms per liter.
J	Estimated value.
X	Due to the presence of Aroclor 1248, 1254, and 1260, the quantitation is based on one peak only.
PCBs	Polychlorinated biphenyls.

Table 4-3. Summary of PCBs Detected for Dead Creek-Sector B and Sites L and M, Sauget-Cahokia, Illinois.

Sample Location:	Site M	Site	Site M	Dead Creek	Site L	Site M
Sample Identification:	M-6A	M-7A	South Shore	Equipment	Equipment	Equipment
Sample Depth:	0-1 ft	0-1 ft	Surface Water	Blank	Blank	Blank
Sample Date:	1/7/92	1/7/92	1/8/92	10/21/91	10/16/91	11/5/91
Units:	mg/kg dw	mg/kg dw	ug/L	ug/L	ug/L	ug/L
Parameters						
Aroclor 1248	260	21 J	<0.50	<0.50 J	<0.50 J	<0.50
Aroclor 1254	190	54	<0.50	<1.0 J	<1.0 J	<1.0
Aroclor 1260	55	22 J	<0.50	<1.0 J	<1.0 J	<1.0
Total PCBs:	**505**	**97**	**0**	**0**	**0**	**0**

mg/kg	Milligrams per kilogram.
dw	Dry weight.
ug/L	Micrograms per liter.
J	Estimated value.
X	Due to the presence of Aroclor 1248, 1254, and 1260, the quantitation is based on one peak only.
PCBs	Polychlorinated biphenyls.

Table 4-4. Summary of Inorganic Parameters Detected in Dead Creek-Sector B and Sites L and M, Sauget-Cahokia, Illinois.

Sample Location:	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek
Sample Identification:	A-B1	A-B2	A-B3	B-B1	B-B2	B-B3
Sample Depth:	0-2 ft	2-4 ft	5-6 ft	0-2 ft	4-6 ft	2-4 ft
Sample Date:	10/18/91	10/18/91	10/18/91	10/18/91	10/18/91	10/18/91
Units:	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Parameters						
Aluminum	5780	9310	9290	49200	7170	7460
Antimony	20.3 BJ	<14.2 J	<13.3 J	<14.6 J	<13.5 J	<12.6 J
Barium	2970	240	230	1980	202	274
Cadmium	51.7 J	R	R	22.0 J	R	R
Calcium	12500	9650	16000	17300	16100	18500
Chromium	134	12.3	12.0	71.1	10.4	10.9
Cobalt	17.2 B	7.4 B	11.0 B	10.3 B	8.7 B	10.5 B
Copper	12100 J	<28.3	<29.9	3160 J	<21.8	23.6 J
Iron	39000	19500	15800	24200	17600	14400
Magnesium	3130	6860	7680	3030	7160	7460
Manganese	108 J	226 J	305 J	119 J	177 J	252 J
Nickel	1170 J	18.5 J	23.6 J	292 J	19.3 J	22.6 J
Potassium	830 B	2940	1800	1070 B	1470	1700
Silver	11.7 J	<2.8 J	<2.7 J	5.1 J	<2.7 J	<2.5 J
Sodium	<225	<251	<269	<259	<281	<304
Vanadium	23.3	23.5	24.9	16.4	20.2	22.2
Zinc	13600	<106	1010	5140	<65.0	<133
Mercury	1.2	0.03	0.03	1.1	0.03	0.02
Lead	1520	14.8	12.5	696	10	11.7
Selenium	6.2 J	R	R	4.4 J	R	R
Arsenic	100 J	4.5 J	12.2 J	72.2 J	11.1 J	2.5 J
Cyanide	17.4	<0.36	<0.33	2.5	<0.34	<0.31

mg/kg	Milligrams per kilogram.
dw	Dry weight.
ug/L	Micrograms per liter.
B	Concentration was less than the contract required detection limit but greater than or equal to the instrument detection limit.
NA	Not analyzed.
J	Estimated value.
R	Unusable value.

Table 4-4. Summary of Inorganic Parameters Detected in Dead Creek-Sector B and Sites L and M, Sauget-Cahokia, Illinois.

Sample Location:	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek
Sample Identification:	C-B1	C-B2	C-B3	D-B1	D-B2	D-B3
Sample Depth:	0-1.5 ft	1.5-3.5 ft	3.5-5.5 ft	0-1.5 ft	2.0-4.0 ft	4.0-6.0 ft
Sample Date:	10/21/91	10/21/91	10/21/91	10/21/91	10/21/91	10/21/91
Units:	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Parameters						
Aluminum	11800	21000	7010	6590	21500	11000
Antimony	20.5 BJ	<14.2 J	<14.2 J	41.9 J	<13.7 J	<12.8 J
Barium	4480	241	724	8640	294	252
Cadmium	37.5 J	12.5 J	R	69.6 J	36.6 J	R
Calcium	12500	5150	12000	20400	5870	17200
Chromium	187	47.3	12.6	104	50.5	16.6
Cobalt	12.3 B	10.1 B	11.1 B	12.4 B	11.0 B	8.1 B
Copper	10300 J	<66.1	321 J	25100 J	<46.8	<28.8
Iron	27300	18600	18700	48700	19100	16200
Magnesium	3660	4930	6540	3380	4830	7770
Manganese	106 J	110 J	582 J	153 J	117 J	337 J
Nickel	417 J	127 J	41.4 J	1260 J	105 J	18.8 J
Potassium	2030	3100	1460	1010 B	2910	2180
Silver	12.1 J	<2.8 J	<2.8 J	21.0 J	<2.7 J	<2.6 J
Sodium	<300	<254	<221	<362	<231	<211
Vanadium	39.4	50.0	22.4	30.8	58.2	30.6
Zinc	11700	3500	1090	26100	5280	<94.9
Mercury	3.6	0.080	0.040	5.0	0.080	0.060
Lead	1550	38.2	15.2	2660	53.4	10.8
Selenium	5.8 J	R	R	9.45 J	R	R
Arsenic	198 J	13.2 J	4.2 J	63.1 J	15.1 J	6.7 J
Cyanide	<0.48	NA	NA	<0.49	NA	NA

mg/kg	Milligrams per kilogram.
dw	Dry weight.
ug/L	Micrograms per liter.
B	Concentration was less than the contract required detection limit but greater than or equal to the instrument detection limit.
NA	Not analyzed.
J	Estimated value.
R	Unusable value.

Table 4-4. Summary of Inorganic Parameters Detected in Dead Creek-Sector B and Sites L and M, Sauget-Cahokia, Illinois.

Sample Location:	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek
Sample Identification:	E-B1	E-B3	E-B2	F-B1	F-B2	F-B3
Sample Depth:	0-2 ft	2-4 ft	4-6 ft	0-2 ft	2-4 ft	4-6 ft
Sample Date:	10/21/91	10/21/91	10/21/91	10/22/91	10/22/91	10/22/91
Units:	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Parameters						
Aluminum	12300	9910	16300	9890	20200	10600
Antimony	33.3 J	<13.4 J	<14.2 J	42.6 J	<14.2 J	<12.1 J
Barium	8020	241	272	4110	312	259
Cadmium	38.8 J	3.6 J	1.5 J	243 J	7.7 J	R
Calcium	16100	7430	18200	11100	6520	20600
Chromium	296	20.7	21.4	107	49.2	15.5
Cobalt	10.7 B	17.2	8.2 B	29.9	11.6 B	7.3 B
Copper	19400 J	<33.0	<29.0	12300 J	174 J	<26.7
Iron	46600	15800	24000	86400	21800	16200
Magnesium	3440	5100	7670	3730	5200	8290
Manganese	96.4 J	101 J	702 J	557 J	132 J	493 J
Nickel	686 J	104 J	21.2 J	2020 J	181 J	18.7 J
Potassium	1260 B	1900	2980	1610 B	2970	2200
Silver	19.0 J	<2.7 J	<2.8 J	16.1 J	<2.8 J	<2.4 J
Sodium	<446	<177	<276	<355	<178	<186
Vanadium	54.8	30.4	43.6	54.9	59.6	29.4
Zinc	18500	2770	<84.2	42800	4100	<69.4
Mercury	3.3	0.050	0.030	3.9	0.090	0.030
Lead	1810	18.6	13.7	2310	34.3	12.5
Selenium	6.2 J	R	R	8.7 J	R	R
Arsenic	107 J	12.9 J	3.9 J	83.2 J	13.1 J	4.4 J
Cyanide	0.78	NA	NA	1.5	NA	NA

mg/kg Milligrams per kilogram.
dw Dry weight.
ug/L Micrograms per liter.
B Concentration was less than the contract required detection limit but greater than or equal to the instrument detection limit.
NA Not analyzed.
J Estimated value.
R Unusable value.

Table 4-4. Summary of Inorganic Parameters Detected in Dead Creek-Sector B and Sites L and M, Sauget-Cahokia, Illinois.

Sample Location:	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek
Sample Identification:	G-B1	G-B2	G-B3	H-B1	H-B2	H-B3
Sample Depth:	0-2 ft	2-4 ft	4-6 ft	0-2 ft	2-4 ft	4-6 ft
Sample Date:	10/22/91	10/23/91	10/23/91	10/23/91	10/23/91	10/23/91
Units:	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Parameters						
Aluminum	6970	8300	13300	12100	9180	8450
Antimony	44.5 J	<13.3 J	<12.9 J	20.7 BJ	<12.8 J	<14.5 J
Barium	8850	172	248	2040	204	175
Cadmium	112 J	R	11.8 J	80.7 J	5.8 J	5.3 J
Calcium	9360	11300	3880	11200	6190	6310
Chromium	104	13.3	32.0	63.1	84.5	14.8
Cobalt	24.9	17.5	24.4	12.2 B	8.9 B	12.0 B
Copper	17500 J	<16.9	<72.5	3560 J	<26.5	<19.3
Iron	62900	12600	12900	36100	9480	11400
Magnesium	2570	7050	3660	3670	4240	4960
Manganese	132 J	207 J	72.3 J	141 J	82.2 J	83.2 J
Nickel	1440 J	37.6 J	444 J	597 J	127 J	231 J
Potassium	796 B	1680	1930	1900 B	1510	1790
Silver	17.4 J	<2.7 J	<2.6 J	6.0 J	<2.6 J	<2.9 J
Sodium	<307	<137	<149	<203	<131	<149
Vanadium	54.4	23.1	35.5	47.6	23.7	27.5
Zinc	31000	<412	6340	13100	2180	2390
Mercury	0.29	0.040	0.030	1.7	0.040	0.03
Lead	1810	11.5	22.6	1340	15.4	11.3
Selenium	3.7 J	R	R	4.3 J	R	R
Arsenic	95.7 J	19.1 J	12.1 J	52.9 J	6.4 J	15.5 J
Cyanide	0.72	NA	NA	0.70	NA	NA

mg/kg	Milligrams per kilogram.
dw	Dry weight.
ug/L	Micrograms per liter.
B	Concentration was less than the contract required detection limit but greater than or equal to the instrument detection limit.
NA	Not analyzed.
J	Estimated value.
R	Unusable value.

Table 4-4. Summary of Inorganic Parameters Detected in Dead Creek-Sector B and Sites L and M, Sauget-Cahokia, Illinois.

Sample Location:	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek	Dead Creek
Sample Identification:	I-B2	I-B3	I-B1	J-B2	J-B3	J-B1
Sample Depth:	0-2 ft	1.5-3 ft	3-5 ft	0-1.5 ft	1.5-3 ft	3-5 ft
Sample Date:	10/24/91	10/24/91	10/24/91	10/24/91	10/24/91	10/24/91
Units:	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Parameters						
Aluminum	15400 J	13300 J	9750 J	5640 J	13700 J	7280 J
Antimony	<19.0	<13.5	<14.0	44.0	<14.6	<13.9
Barium	1890 J	294 J	189 J	9510 J	279 J	258 J
Cadmium	71.8 J	<19.3	<1.4	82.7 J	16.9 J	1.6 J
Calcium	7760	4860	14900	23600	3940	18000
Chromium	100 J	25.1 J	15.0 J	125 J	150 J	15.9 J
Cobalt	17.2 B	6.0 B	8.6 B	26.8 B	7.9 B	8.0 B
Copper	4070	232	24.3	30100	276	90.5
Iron	31700	17400	19900	54900	14000	15800
Magnesium	4040	4120	7420	2860 B	3110	7420
Manganese	128	85.8	534	240	74.0	488
Nickel	548 J	222 J	19.8 J	2670 J	377 J	34.3 J
Potassium	2420	2200	1940	<595	2070	1650
Silver	4.2	<2.7	<2.7	50.4	<2.9	<2.7
Sodium	215 B	162 B	180 B	452 B	1464	187 B
Vanadium	44.1	35.2	25.6	58.9	34.7	21.6
Zinc	9950	3280	83.3	4500	4300	524
Mercury	0.25	0.090	0.070	0.14	0.10	0.10
Lead	1360	44.5	14.1	1820	76.8	26.2
Selenium	3.9 J	<2.7 J	<1.4 J	<6.0 J	<2.9 J	<2.7 J
Arsenic	89.5	7.3	11.1	70.5 J	8.4	4.4
Cyanide	0.53 J	NA	NA	<0.79	NA	NA

mg/kg Milligrams per kilogram.
dw Dry weight.
ug/L Micrograms per liter.
B Concentration was less than the contract required detection limit but greater than or equal to the instrument detection limit.
NA Not analyzed.
J Estimated value.
R Unusable value.

Table 4-4. Summary of Inorganic Parameters Detected in Dead Creek-Sector B and Sites L and M, Sauget-Cahokia, Illinois.

Sample Location:	Site L	Site L	Site L	Site L	Site L	Site L
Sample Identification:	L1 (LB-16/LB-17)	L1 (LB-17)	L2 (LB-13)	L3 (LB-14)	L4 (LB-12)	L5 (LB-10)
Sample Depth:	3-8 ft	8-14 ft	8-10 ft	9-11 ft	8-10 ft	7-8.5 ft
Sample Date:	10/16/91	10/16/91	10/15/91	10/16/91	10/15/91	10/15/91
Units:	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw	mg/kg dw
Parameters						
Aluminum	7320	6660	3190	12800	5290	2810
Antimony	<11.6 J	<12.3 J	<12.6 J	<13.7 J	<12.8 J	<13.6 J
Barium	1440	235	1360	208	194	213
Cadmium	42.0	<1.2	<1.3	<1.4	<1.3	<1.4
Calcium	75500	18200	21300	22400	15500	15700
Chromium	27.0	11	3.9	17.8	7.8	4.1
Cobalt	8.3 B	7.3 B	<2.5	8.4 B	5.9 B	<2.7
Copper	308 J	96.1 J	<6.3 J	19.4 J	9.7 J	52.9 J
Iron	24000	12400	1400	21700	11800	1790
Magnesium	5150	7210	705 B	9440	6570	384 B
Manganese	535	269	88.1	782	259	10.1
Nickel	95.9 J	473 J	71.9 J	24.7 J	113 J	<10.8 J
Potassium	1130 B	1390	975 B	2280	1090 B	993 B
Silver	<2.3	<2.5	<2.5	<2.7	<2.6	<2.7
Sodium	<295	<347	<226	<303	<332	<136
Vanadium	27.6	19.7	131	35.4	15.6	7.7 B
Zinc	4240 J	364 J	756 J	77.0 J	35.6 J	6.4 J
Mercury	1.8 J	0.19 J	0.010 J	0.030 J	0.010 J	0.020 J
Lead	664 J	106 J	5.3 J	11.7 J	7.6 J	8.7 J
Selenium	<1.2 J	<1.2 J	<1.3 J	<1.4	<1.3 J	<1.4 J
Arsenic	49.2	90.9	68.7	10.1	4.9	12.6
Cyanide	0.46 J	<0.31 J	NA	NA	NA	NA

mg/kg	Milligrams per kilogram.
dw	Dry weight.
ug/L	Micrograms per liter.
B	Concentration was less than the contract required detection limit but greater than or equal to the instrument detection limit.
NA	Not analyzed.
J	Estimated value.
R	Unusable value.

Table 4-4. Summary of Inorganic Parameters Detected in Dead Creek-Sector B and Sites L and M, Sauget-Cahokia, Illinois.

Sample Location:	Site M	Site M	Site M	Site M	Dead Creek	Dead Creek
Sample Identification:	M1	M2	M3	South Shore	Equipment	Equipment
Sample Depth:	0-3 ft	0-3.5 ft	0-8 ft	Surface Water	Blank	Blank
Sample Date:	11/5/91	11/5/91	11/5/91	1/8/92	10/21/91	10/21/91
Units:	mg/kg dw	mg/kg dw	mg/kg dw	ug/L	ug/L	ug/L
Parameters						
Aluminum	4670	7220	7290	<200	<200	<200
Antimony	<30.8 J	16.6 BJ	41.2 J	<50	<50.0	<50.0
Barium	1760	3080	9060	140	40.8 B	<10
Cadmium	17.2	8.6	47.2	<5.0	<5.0	<5.0
Calcium	11500	5560	12500	46000	844 B	462 B
Chromium	80	89.5	183	<10	<10.0	<10.0
Cobalt	18.8 B	9.1 B	20.6 B	<10	<10.0	<10.0
Copper	8150	13400	21000	200	68.9	<25.0
Iron	16300	20600	48500	270	435	98.4 B
Magnesium	6200	3090	4340	3900	168 B	<50.0
Manganese	154	162	178	56	<10.0	<10.0
Nickel	1390	959	2490	<40.0	<40.0	<40.0
Potassium	758 B	1080 B	989 B	3700	<1000	<1000
Silver	18.0	19.6	26.0	<10	<10.0	<10.0
Sodium	<309	211 B	<338	20000	8140	665 B
Vanadium	19.3 B	29.3	37.7	<10.0	<10.0	<10.0
Zinc	9930	12300	31600	130	140	375
Mercury	0.07	0.38	0.45	<0.20	<0.20	<0.20
Lead	625	796	1910	11 J	5.5	<3.0
Selenium	<3.1	<1.6 J	<3.2 J	<10.0	<5.0 J	<5.0 J
Arsenic	25.2 J	7.0 J	94.0 J	<10.0	<10.0	<10.0 J
Cyanide	NA	NA	1.3 J	<10.0	NA	NA

mg/kg Milligrams per kilogram.
dw Dry weight.
ug/L Micrograms per liter.
B Concentration was less than the contract required detection limit but greater than or equal to the instrument detection limit.
NA Not analyzed.
J Estimated value.
R Unusable value.

Table 4-4. Summary of Inorganic Parameters Detected in Dead Creek-Sector B and Sites L and M, Sauget-Cahokia, Illinois.

Sample Location:	Dead Creek	Site L	Site M
Sample Identification:	Equipment	Equipment	Equipment
Sample Depth:	Blank	Blank	Blank
Sample Date:	10/24/91	10/16/91	11/5/91
Units:	ug/L	ug/L	ug/L
Parameters			
Aluminum	<200	<200	<200
Antimony	<50.0	<50.0	<50.0
Barium	<10.0	<10.0	<10.0
Cadmium	<5.0	<5.0	<5.0
Calcium	497 B	341 B	395 B
Chromium	<10.0	<10.0	<10.0
Cobalt	<10.0	<10.0	<10.0
Copper	<25.0	<25.0	81.4
Iron	171	151	<50.0
Magnesium	<50.0	<50.0	<50.0
Manganese	<10.0	<1[illegible]	<10.0
Nickel	<40.0	<40.0	<40.0
Potassium	<1000	<1000	<1000
Silver	<10.0	<10.0	<10.0
Sodium	<500	997 B	<500
Vanadium	<10.0	<10.0	<10.0
Zinc	29.7	<20.0	<20.0
Mercury	<0.20	<0.20 J	<0.20
Lead	<5.0	<3.0	<3.0
Selenium	<10	<5.0	5.0
Arsenic	<10	<10.0	<10.0
Cyanide	NA	<10	<10

mg/kg	Milligrams per kilogram.
dw	Dry weight.
ug/L	Micrograms per liter.
B	Concentration was less than the contract required detection limit but greater than or equal to the instrument detection limit.
NA	Not analyzed.
J	Estimated value.
R	Unusable value.

Table 4-5. Summary of RCRA Hazardous Characteristic Parameters for Dead Creek Sector B and Sites L and M, Sauget-Cahokia, Illinois.

Sample Location:		Dead Creek	Dead Creek	Dead Creek	Dead Creek
Sample Identification:		AB	CDE	FGH	IJ
Sample Depth:		0-6 ft	0-6 ft	0-6 ft	0-5 ft
Sample Date:		10/18/91	10/21/91	10/23/91	10/24/91
Parameters	Regulatory Limit				
Ignitability - Flash point	< 140 degrees F	non-ignitable	non-ignitable	non-ignitable	non-ignitable
Corrosivity (pH units)	< 2 or > 12.5	6.3	6.6	6.8	6.5
Reactivity (concentrations in mg/kg dw)					
Sulfide	500	16	< 3.8	< 3.8	< 4.5
Cyanide	250	< 1.5	< 1.5	< 1.5	< 1.8
Volatiles - (concentrations in mg/L)					
Benzene	0.5	< 0.020	< 0.020	< 0.020	< 0.020
Carbon tetrachloride	0.5	< 0.020	< 0.020	< 0.020	0.035
Chlorobenzene	100	0.053 (0.053)*	< 0.020	< 0.020	0.045 (0.039)*
Chloroform	6	< 0.020	< 0.020	< 0.020	< 0.020
1,2-Dichloroethane	0.5	< 0.020	< 0.020	< 0.020	0.027
1,1-Dichloroethylene	0.7	< 0.020	< 0.020	< 0.020	0.41 (0.15)*
2-Butanone (MEK)	200	< 0.40	< 0.40	< 0.40	< 0.40
Tetrachloroethylene	0.7	< 0.020	< 0.020	< 0.020	< 0.020
Trichloroethylene	0.5	< 0.020	< 0.020	< 0.020	< 0.020
Vinyl chloride	0.2	< 0.040	< 0.040	< 0.040	< 0.040
Semivolatiles (concentrations in mg/L)					
Cresol (o)	200	< 0.050	< 0.050	< 0.050	< 0.050
Cresol (m,p)	200	< 0.050	< 0.050	< 0.050	< 0.050
1,4-Dichlorobenzene	7.5	< 0.050	< 0.050	< 0.050	< 0.050
2,4-Dinitrotoluene	0.13	< 0.050	< 0.050	< 0.050	< 0.050
Hexachlorobenzene	0.13	< 0.050	< 0.050	< 0.050	< 0.050
Hexachlorobutadiene	0.5	< 0.050	< 0.050	< 0.050	< 0.050
Hexachloroethane	3	< 0.050	< 0.050	< 0.050	< 0.050
Nitrobenzene	2	< 0.050	< 0.050	< 0.050	< 0.050
Pentachlorophenol	100	< 0.25	< 0.25	< 0.25	< 0.25
2,4,5-Trichlorophenol	400	< 0.25	< 0.25	< 0.25	< 0.25
2,4,6-Trichlorophenol	2	< 0.050	< 0.050	< 0.050	< 0.050
Pyridine	5	< 0.25	< 0.25	< 0.25	< 0.25

See page 4 for footnotes.

Table 4-5. Summary of RCRA Hazardous Characteristic Parameters for Dead Creek Sector B and Sites L and M, Sauget-Cahokia, Illinois.

Sample Location:		Dead Creek	Dead Creek	Dead Creek	Dead Creek
Sample Identification:		AB	CDE	FGH	IJ
Sample Depth:		0-6 ft	0-6 ft	0-6 ft	0-5 ft
Sample Date:		10/18/91	10/21/91	10/23/91	10/24/91
Parameters	Regulatory Limit				
Pesticides (concentrations in mg/L)					
Chlorodane	0.03	<0.0050	<0.0050	<0.0050	<0.0050
Endrin	0.02	<0.0010	<0.0010	<0.0010	<0.0010
Heptachlor	0.008	<0.00050	<0.00050	<0.00050	<0.00050
Heptachlor epoxide	0.008	<0.00050	<0.00050	<0.00050	<0.00050
Lindane (g-BHC)	0.4	<0.00050	<0.00050	<0.00050	<0.00050
Methoxychlor	10	<0.025	<0.025	<0.025	<0.025
Toxaphene	0.5	<0.050	<0.050	<0.050	<0.050
Herbicides (concentrations in mg/L)					
2,4-D	10	<0.050	<0.050	<0.050	<0.050
Silvex (2,4,5-TP)	1	<0.010	<0.010	<0.010	<0.010
Metals (concentrations in mg/L)					
Arsenic	5	<0.20	<0.20	<0.20	<0.20
Barium	100	1.9 (1.8)*	1.9 (1.8)*	2.5 (2.4) *	2.5 (2.5)*
Cadmium	1	0.083 (0.074)*	0.13 (0.12)*	0.34 (0.29)*	0.51 (0.43)*
Chromium	5	<0.050	<0.050	<0.050	<0.050
Lead	5	<0.20	<0.20	0.29 (0.26)*	0.23 (0.21)*
Mercury	0.2	<0.020	<0.020	<0.020	<0.020
Selenium	1.0	<0.50	<0.50	<0.50	<0.50
Silver	5.0	<0.010	<0.010	<0.010	<0.010

See page 4 for footnotes.

Table 4-5. Summary of RCRA Hazardous Characteristic Parameters for Dead Creek Sector B and Sites L and M, Sauget-Cahokia, Illinois.

Sample Location:		Site L	Site L	Site M	Site M
Sample Identification:		GML1 (LB-16/LB-17)	GML1 (LB-17)	M1, M2, M3	Composite-M3
Sample Depth:		3-8 ft	8-14 ft	0-8 ft	0-5 ft
Sample Date:		10/16/91	10/16/91	11/5/91	12/4/91
Parameters	Regulatory Limit				
Ignitability - Flash point	< 140 degrees F	non-ignitable	non-ignitable	non-ignitable	NA
Corrosivity (pH units)	< 2 or > 12.5	8.2	8.4	7.2	NA
Reactivity (concentrations in mg/kg dw)					
Sulfide	500	71	24	500	< 4.5
Cyanide	250	< 1.0	< 1.1	< 1.6	NA
Volatiles (concentrations in mg/L)					
Benzene	0.5	< 0.020	< 0.020	< 0.020	NA
Carbon tetrachloride	0.5	< 0.020	< 0.020	< 0.020	NA
Chlorobenzene	100	0.041 (0.036)*	< 0.020	0.076 (0.063)	NA
Chloroform	6	< 0.020	< 0.020	< 0.020	NA
1,2-Dichloroethane	0.5	< 0.020	< 0.020	< 0.020	NA
1,1-Dichloroethylene	0.7	< 0.020	< 0.020	< 0.020	NA
2-Butanone (MEK)	200	< 0.40	< 0.40	< 0.40	NA
Tetrachloroethylene	0.7	< 0.020	< 0.020	< 0.020	NA
Trichloroethylene	0.5	< 0.020	< 0.020	< 0.020	NA
Vinyl chloride	0.2	< 0.040	< 0.040	< 0.040	NA
Semivolatiles (concentrations in mg/L)					
Cresol (o)	200	< 0.050	< 0.050	< 0.050	NA
Cresol (m,p)	200	0.17 (0.10)*	0.19 (0.11)*	< 0.050	NA
1,4-Dichlorobenzene	7.5	0.41(0.33)*	< 0.050	< 0.050	NA
2,4-Dinitrotoluene	0.13	< 0.050	< 0.050	< 0.050	NA
Hexachlorobenzene	0.13	< 0.050	< 0.050	< 0.050	NA
Hexachlorobutadiene	0.5	< 0.050	< 0.050	< 0.050	NA
Hexachloroethane	3	< 0.050	< 0.050	< 0.050	NA
Nitrobenzene	2	< 0.050	< 0.050	< 0.050	NA
Pentachlorophenol	100	< 0.25	< 0.25	< 0.25	NA
2,4,5-Trichlorophenol	400	< 0.25	< 0.25	< 0.25	NA
2,4,6-Trichlorophenol	2	< 0.050	< 0.050	< 0.050	NA
Pyridine	5	< 0.25	< 0.25	< 0.25	NA

See page 4 for footnotes.

Table 4-5. Summary of RCRA Hazardous Characteristic Parameters for Dead Creek Sector B and Sites L and M, Sauget-Cahokia, Illinois.

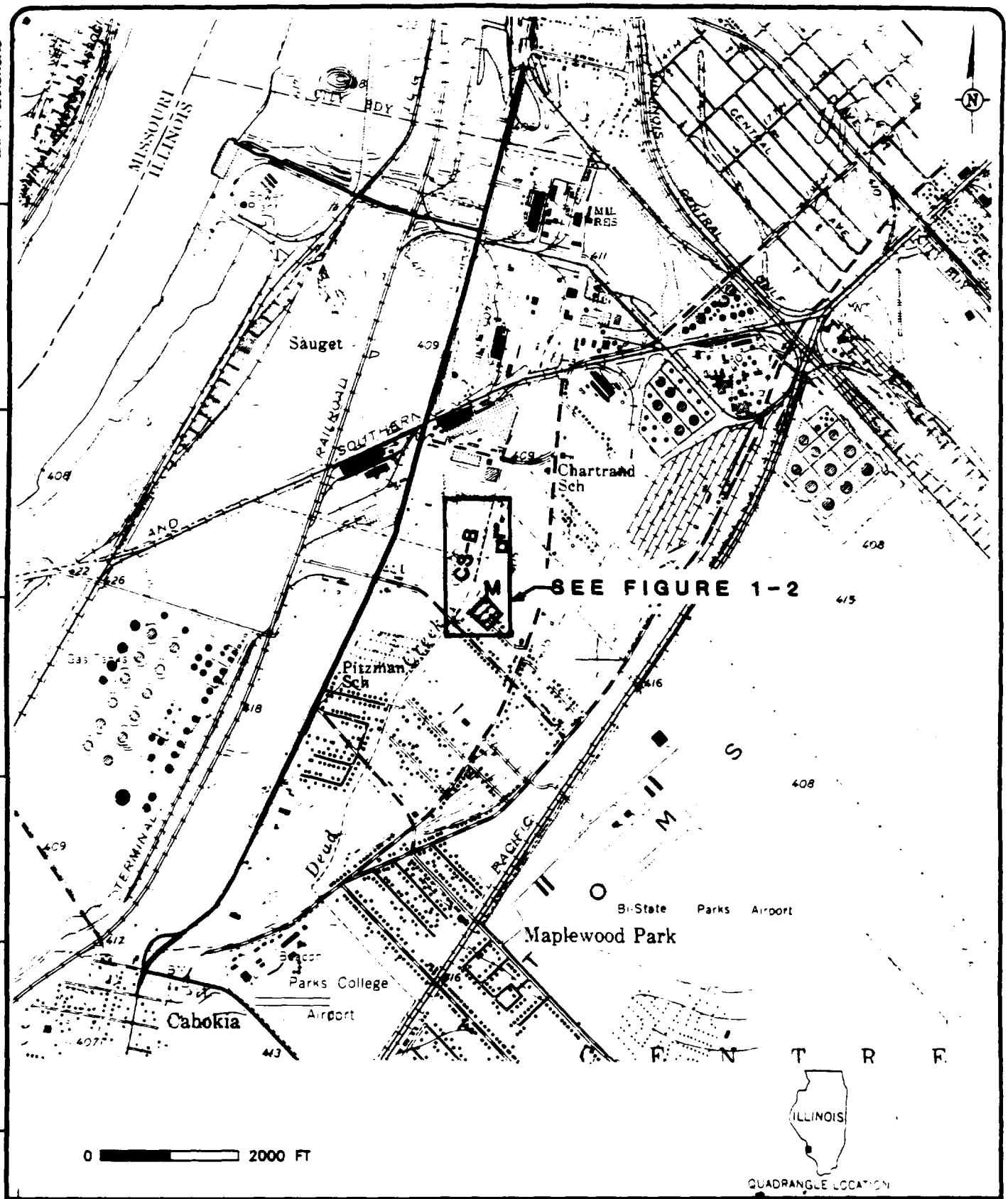
Sample Location:		Site L	Site L	Site M	Site M
Sample Identification:		GML1 (LB-16/LB-17)	GML1 (LB-17)	M1, M2, M3	Composite-M3
Sample Depth:		3-8 ft	8-14 ft	0-8 ft	0-5 ft
Sample Date:		10/16/91	10/16/91	11/5/91	12/4/91
Parameters	Regulatory Limit				
Pesticides (concentrations in mg/L)					
Chlorodane	0.03	<0.0050	<0.0050	<0.0050	NA
Endrin	0.02	<0.0010	<0.0010	<0.0010	NA
Heptachlor	0.008	<0.00050	<0.00050	<0.00050	NA
Heptachlor epoxide	0.008	<0.00050	<0.00050	<0.00050	NA
Lindane (g-BHC)	0.4	<0.00050	<0.00050	<0.00050	NA
Methoxychlor	10	<0.025	<0.025	<0.025	NA
Toxaphene	0.5	<0.050	<0.050	<0.050	NA
Herbicides (concentrations in mg/L)					
2,4-D	10	<0.050	<0.050	<0.050	NA
Silvex (2,4,5-TP)	1	<0.010	<0.010	<0.010	NA
Metals (concentrations in mg/L)					
Arsenic	5	<0.20	<0.20	<0.20	NA
Barium	100	1.8 (1.7)*	1.4 (1.3)*	3.7 (3.5)*	NA
Cadmium	1	0.066 (0.059)*	0.021 (0.019)*	0.037 (0.031)*	NA
Chromium	5	<0.050	<0.050	<0.050	NA
Lead	5	0.24 (0.22)*	<0.20	0.52 (0.44)*	NA
Mercury	0.2	<0.020	<0.020	<0.020	NA
Selenium	1.0	<0.50	<0.50	<0.50	NA
Silver	5.0	<0.010	<0.010	<0.010	NA

NA Not analyzed.
mg/L Milligrams per liter.
mg/kg dw Milligrams per kilogram, dry weight.
< Less than.
> Greater than.
* Methods SW-846-1311 - Toxicity characteristic leaching procedure (TCLP) results which are above the quantitation limit have been corrected by analytical bias per instructions in Section 8.2.5 of Method 1311 (Federal Register, June 29, 1990). The first number reported is the corrected TCLP value (used to determine if the sample is hazardous) and the value in parenthesis ( ) is the uncorrected analytical results.
RCRA Resource Conservation and Recovery Act.

Table 4-6. Ranges of Metal Concentrations for Dead Creek Sector B and Background Soils.

Parameter	Eastern United States (1) (mg/kg)	Dead Creek Sector B (3) (mg/kg)
Aluminum	0.7 to >10*	5,640 to 49,200
Antimony	<1 to 8.8	20.3 to 44.5
Barium	10 to 1,500	172 to 9,510
Beryllium	<1 to 7	NA
Cadmium	NA	1.5 to 243
Calcium	0.01 to 28*	3,880 to 23,600
Chromium	1 to 1,000	10.4 to 296
Cobalt	<0.3 to 70	6.0 to 29.9
Copper	<1 to 700	23.6 to 30,100
Iron	0.01 to >10*	9,480 to 86,400
Magnesium	0.005 to 5*	2,570 to 8,290
Manganese	<2 to 7,000	72.3 to 702
Nickel	<5 to 700	18.3 to 2,670
Potassium	0.005 to 3.7*	796 to 3,100
Silver	NA	4.2 to 50.4
Sodium	<0.05 to 5*	162 to 1,464
Vanadium	<7 to 300	16.4 to 59.6
Zinc	<5 to 2,900	83.3 to 42,800
Mercury	0.01 to 3.4	0.02 to 5.0
Lead	<10 to 300	10 to 2,660
Selenium	<0.1 to 3.9	3.7 to 9.45
Arsenic	<0.1 to 73	2.5 to 188

mg/kg Milligrams per kilogram.
* Expressed as a percentage.
NA Not analyzed.
(1) United States Geological Survey (1984).
(2) Geraghty & miller, Inc. (Table 4-4).

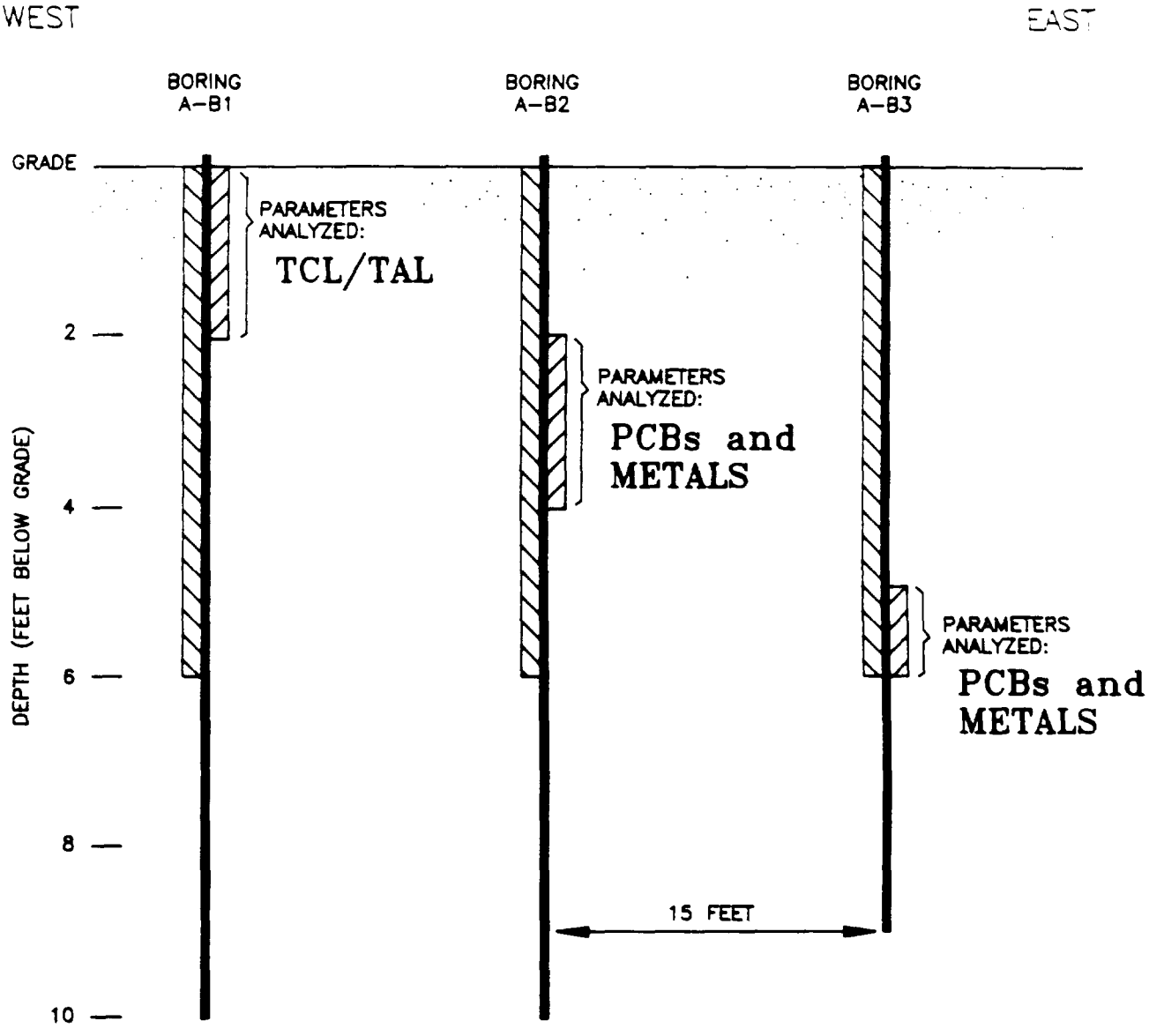


DRAFTER: V. CARUNCHO | APPROVED: B. BLUM | CHECKED: B. BLUM | DRAWING: TOPO | FILE NO.: 1444 | PRJCT NO.: NY60508 | DWG DATE: 8/81

GERAGHTY & MILLER, INC.
Environmental Services

LOCATION OF DEAD CREEK SECTOR B AND SITES L AND M, SAUGET–CAHOKIA, ILLINOIS

FIGURE 1-1



EXPLANATION

SAMPLE INTERVAL USED TO ANALYZE THOSE PARAMETERS LISTED ADJACENT TO INTERVAL

SAMPLE INTERVALS WHICH WERE COMPOSITED FROM GRADE TO A DEPTH OF SIX FEET FOR ANALYSIS OF TCLP PARAMETERS, REACTIVITY, CORROSIVITY, AND IGNITABILITY

TCL - TARGET COMPOUND LIST

TAL - TARGET ANALYTE LIST

TCLP - TOXICITY CHARACTERISTIC LEACHING PROCEDURE

PCBs - POLYCHLORINATED BIPHENYLS

GERAGHTY & MILLER, INC.
Environmental Services

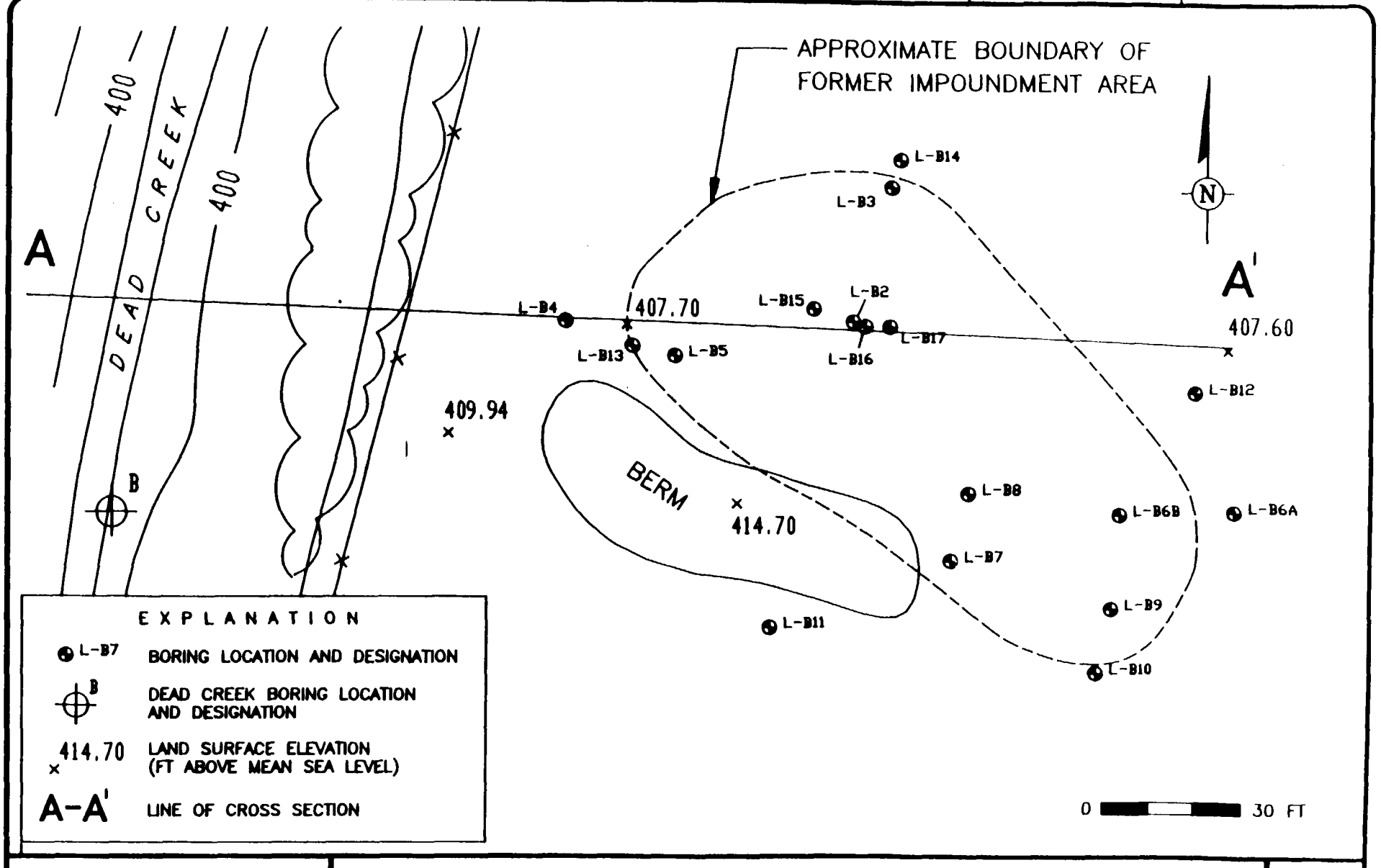
SCHEMATIC DIAGRAM OF SAMPLING PROFILE A, DEAD CREEK SECTOR B, SAUGET-CAHOKIA, ILLINOIS

MONSANTO COMPANY ST. LOUIS, MISSOURI

FIGURE 2-1

DRAFTER: W.H. CICIO | APPROVED: B.A. BLUM | CHECKED: B.A. BLUM | DRAWING: PROFIL-A | FILE NO.: 1444 | PRJCT NO.: NY80508 | DWG DATE: 29JAN92

DWG DATE: 28JAN92	PRJCT NO.: NY60508-	FILE NO.: 1444	DRAWING: AREA-L	CHECKED: B.A. BLUM	APPROVED: B.A. BLUM	DRAFTER: W.H. CICIO



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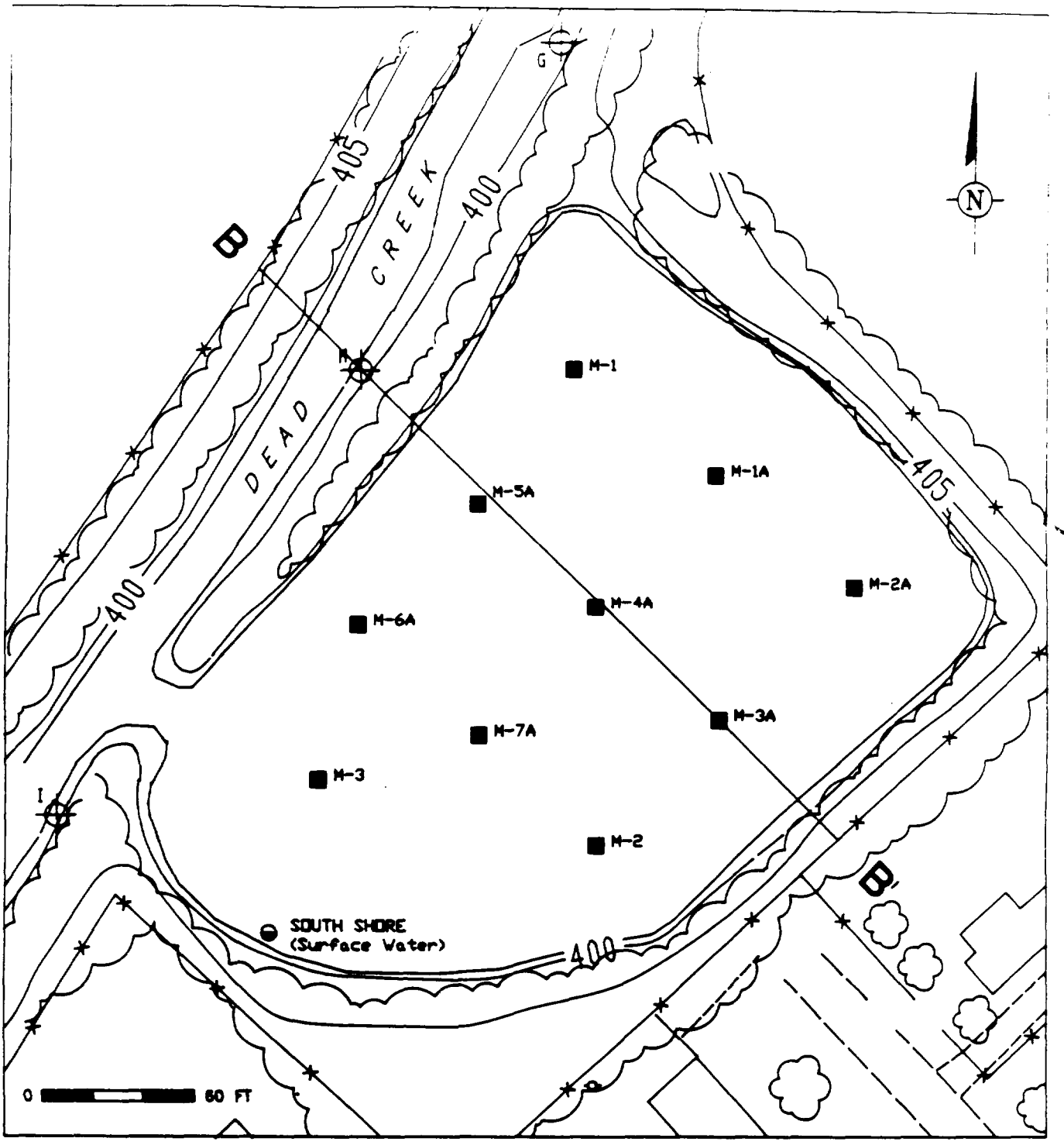
BORING LOCATIONS
SITE L, CAHOKIA, ILLINOIS

MONSANTO COMPANY ST. LOUIS, MISSOURI

FIGURE 2-2



EXPLANATION

B-B' LINE OF CROSS SECTION —400— ELEVATION (MEAN SEA LEVEL)

M-3 SEDIMENT SAMPLING/ANALYSIS LOCATION AND DESIGNATION

SURFACE-WATER SAMPLE LOCATION

I DEAD CREEK BORING PROFILE LOCATION AND DESIGNATION

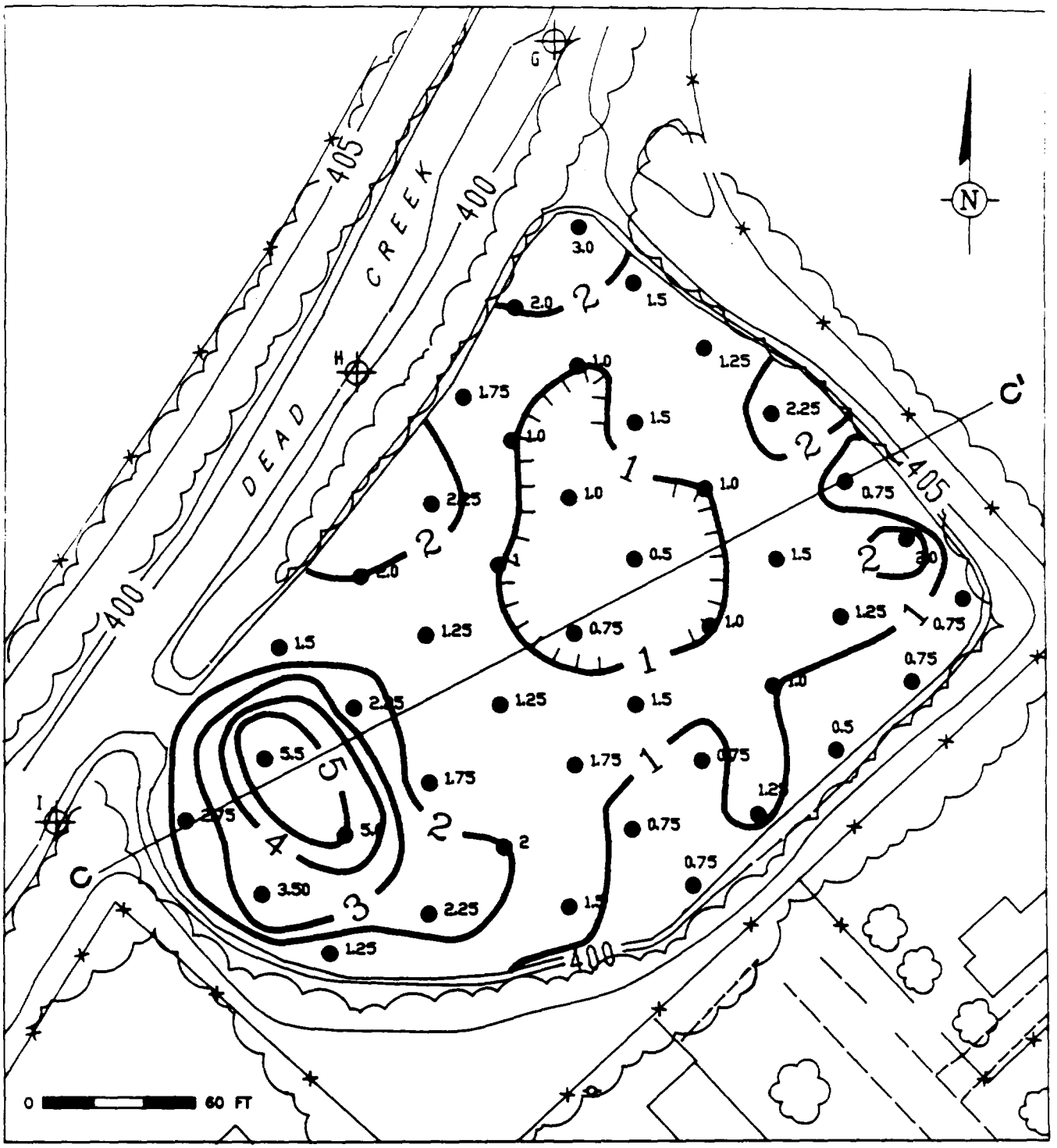
GERAGHTY & MILLER, INC.
Environmental Services

SAMPLING NETWORK
SITE M, CAHOKIA, ILLINOIS

MONSANTO COMPANY ST. LOUIS, MISSOURI

FIGURE
2-3

DRAFTER: W.H. CICIO | APPROVED: B.A. BLUM | CHECKED: B.A. BLUM | DRAWING: SMPNET-M | FILE NO.: 1444 | PRJCT NO.: NY60508 | DWG DATE: 28JAN92



EXPLANATION

● 5.5 SEDIMENT PROFILE LOCATION AND SEDIMENT THICKNESS (IN FEET)	—400— ELEVATION (MEAN SEA LEVEL)
I ⊕ DEAD CREEK BORING PROFILE LOCATION AND DESIGNATION	— 2 — LINE OF EQUAL SEDIMENT THICKNESS (IN FEET)
	C - C' LINE OF CROSS SECTION

GERAGHTY & MILLER, INC.
Environmental Services

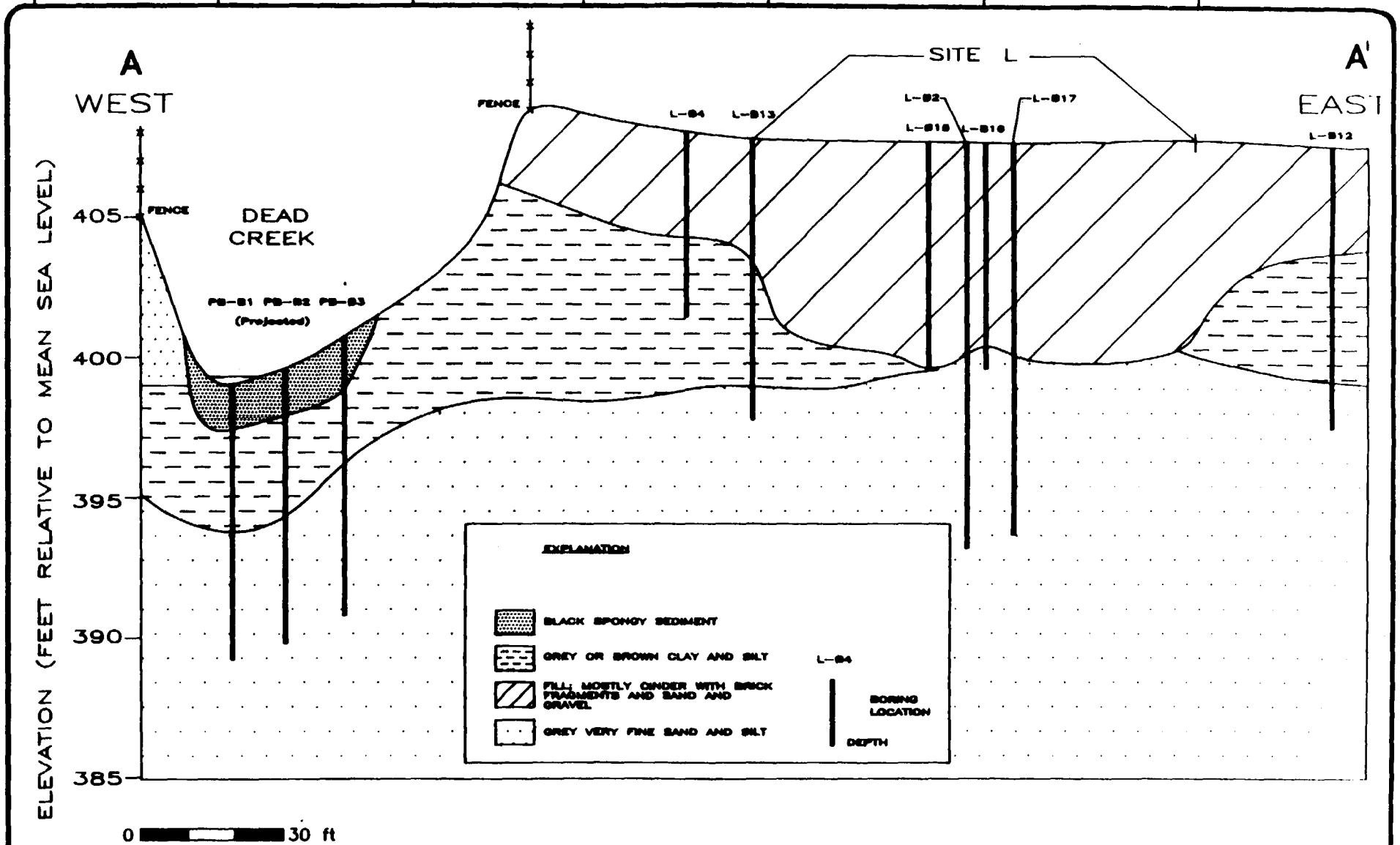
SEDIMENT THICKNESS
SITE M, CAHOKIA, ILLINOIS

MONSANTO COMPANY ST. LOUIS, MISSOURI

FIGURE 2-4

DRAFTER: H. FRIEDMAN | APPROVED: B.A. BLUM | CHECKED: B.A. BLUM | DRAWING: AREA-NP | FILE NO.: 1444 | PRJCT NO.: NY60508 | DWG DATE: 10MAR92

DWG DATE: 02/05/92	PRJCT NO.: NY80508	FILE NO.: 1444	DRAWING: CSEC-AA	CHECKED: B.A. BLUM	APPROVED: B.A. BLUM	DRAFTER: H. FRIEDMAN

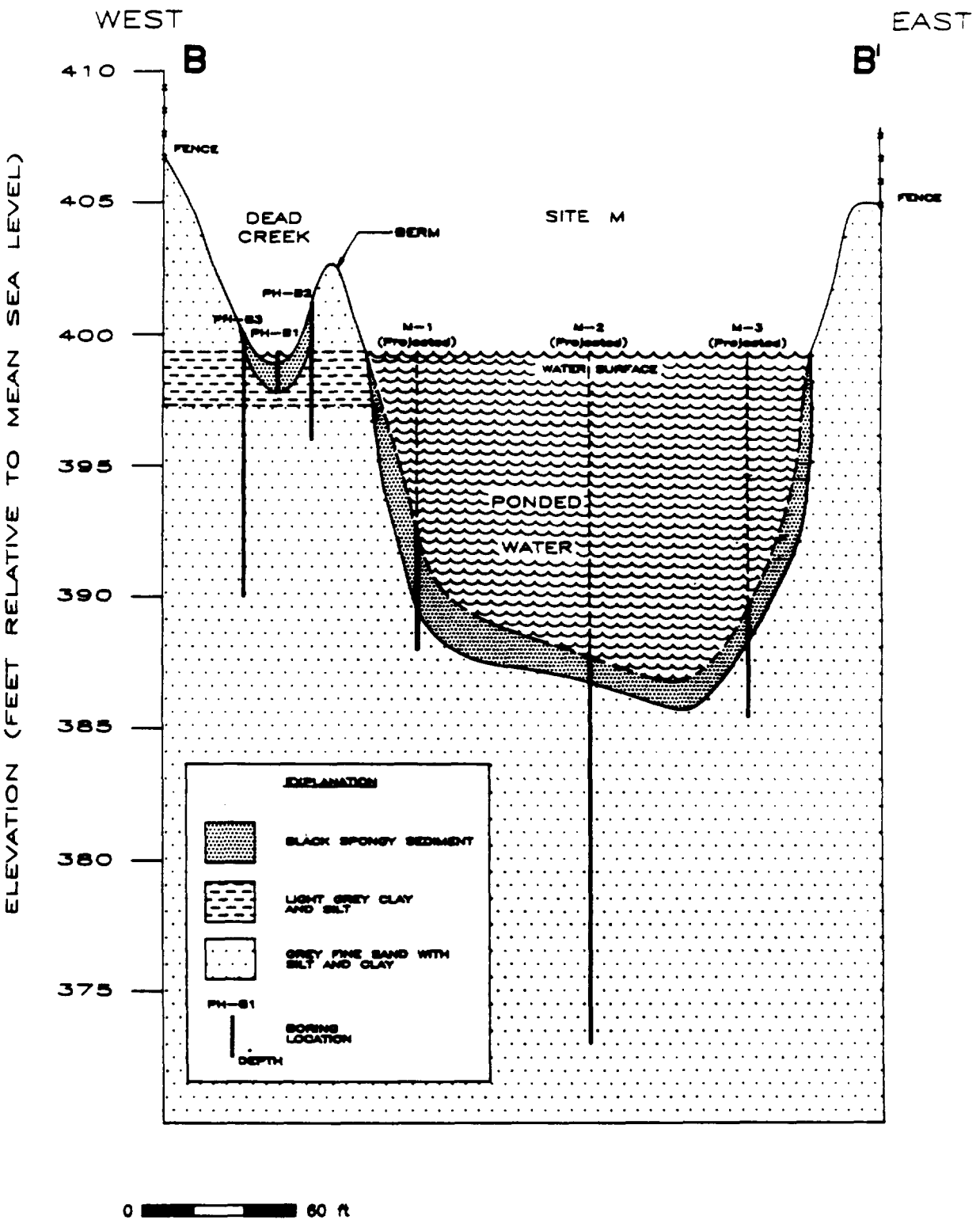


GERAGHTY & MILLER, INC.
Environmental Services

GENERALIZED CROSS SECTION A–A',
DEAD CREEK SECTOR B AND SITE L,
CAHOKIA, ILLINOIS

MONSANTO COMPANY ST. LOUIS MISSOURI

FIGURE
3 – 1



DRAFTER: H. FRIEDMAN | APPROVED: B.A. BLUM | CHECKED: B.A. BLUM | DRAWING: XSEC-B-B | FILE NO.: 1444 | PRJCT NO.: NY80508 | DWG DATE: 02/04/92

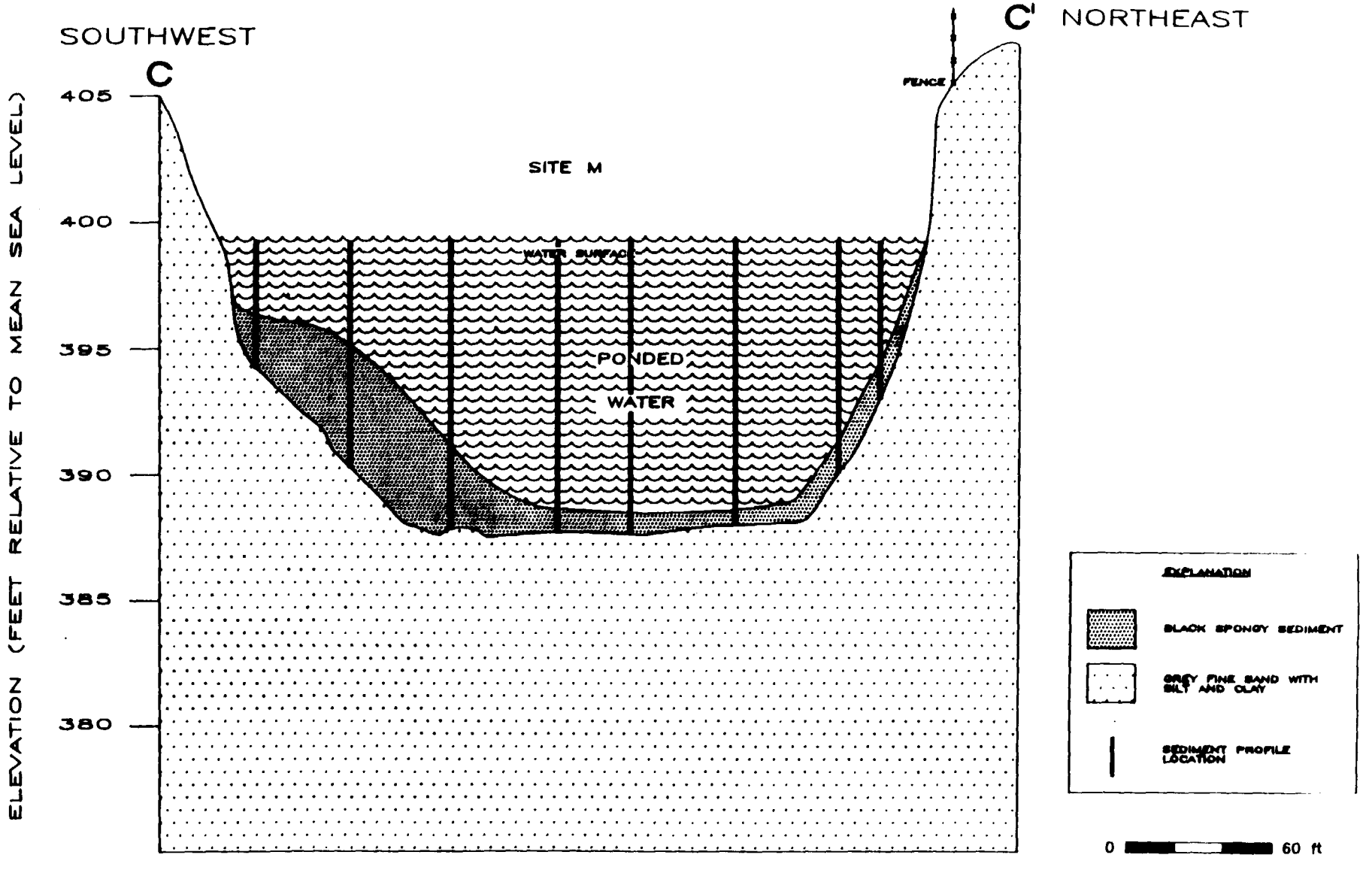
GERAGHTY & MILLER, INC.
Environmental Services

GENERALIZED CROSS SECTION B–B', DEAD CREEK SECTOR B AND SITE M, CAHOKIA, ILLINOIS

MONSANTO COMPANY ST. LOUIS, MISSOURI

FIGURE 3-2

DWG DATE: 10MAR92	PRJCT NO.: NY80508	FILE NO.: 1444	DRAWING: XSEC-CC	CHECKED: D. COLTON	APPROVED: B.A. BLUM	DRAFTER: H. FRIEDMAN



GERAGHTY & MILLER, INC.
Environmental Services

GENERALIZED CROSS SECTION C–C', SITE M,
CAHOKIA, ILLINOIS

MONSANTO COMPANY ST LOUIS, MISSOURI

FIGURE
3-3

APPENDIX A

SEDIMENT/SOIL QUALITY DATA
COLLECTED BY ECOLOGY & ENVIRONMENT, INC.

Table A-1. Summary of Volatile Organic Compounds Detected in Sediments and Soils from Dead Creek Sector B and Sites L and M, Sauget - Cahokia, Illinois.

	Sector B				
Sample Identification:	DC-L1-02	DC-SD-14	DC-SD-18	DC-SD-19	DC-SD-20
Sample Depth:	0-0.5 ft	2-3 ft	0-0.5 ft	0-0.5 ft	1.5-2 ft
Sample Date:	11/5/86	11/5/86	11/5/86	11/5/86	11/5/86
Parameter (concentrations in ppb)					
Methylene chloride	11000 B	2200	12000	13000	14000
Acetone	15000 B	820	4100	10000	6100
Chloroform	--	--	--	--	--
2-Butanone (MEK)	21000 B	510	14000	14000	10000
Benzene	--	87	--	--	--
4-Methyl-2-pentanone	--	220	--	--	--
2-Hexanone	--	--	--	52000	--
Toluene	--	810	--	--	--
Chlorobenzene	--	5200	--	--	--
Ethylbenzene	--	3600	--	--	--
Total Xylenes	--	990	--	--	--

Source - Ecology & Environment, Inc. (1988).

B Compound detected in blank samples.
J Estimated value. Result is less than the specified detection limit, but greater than zero.
-- Not detected.
ppb Parts per billion.

Table A-1. Summary of Volatile Organic Compounds Detected in Sediments and Soils from Dead Creek Sector B and Sites L and M, Sauget - Cahokia, Illinois.

	Site L				
Sample Identification:	DC-L1-02	DC-L2-03	DC-L3-04	DC-L4-09	DC-L4-10
Sample Depth:	5-10 ft	5-15 ft	5-15 ft	10-20 ft	10-20 ft
Sample Date:	12/12/86	12/12/86	12/12/86	12/17/91	12/17/91
Parameter (concentrations in ppb)					
Methylene chloride	14 B	141 B	2278 B	8	5 J
Acetone	907 B	449 B	4557 B	32 B	81 B
Chloroform	–	–	20253	96	49
2-Butanone (MEK)	16	–	10000 B	16 B	–
Benzene	–	141	4177	7 J	4 J
4-Methyl-2-pentanone	8 J	167	–	68 B	49 B
2-Hexanone	–	–	–	–	–
Toluene	–	2179	26582	93	–
Chlorobenzene	–	–	–	–	–
Ethylbenzene	–	40 J	–	–	–
Total Xylenes	–	179	670 J	–	–

Source - Ecology & Environment, Inc. (1988).

B Compound detected in blank samples.
J Estimated value. Result is less than the specified detection limit, but greater than zero.
– Not detected.
ppb Parts per billion.

Table A-1. Summary of Volatile Organic Compounds Detected in Sediments and Soils from Dead Creek Sector B and Sites L and M, Sauget - Cahokia, Illinois.

	Site M		
Sample Identification:	DC-SD-15	DC-SD-16	DC-SD-17
Sample Depth:	0-0.5 ft	0-0.5 ft	0-0.5 ft
Sample Date:	11/5/86	11/5/86	11/5/86
Parameter (concentrations in ppb)			
Methylene chloride	7800 B	10000 B	8400 B
Acetone	4900 B	5100 B	5600 B
Chloroform	–	–	–
2-Butanone (MEK)	11000	14000	13000
Benzene	–	–	–
4-Methyl-2-pentanone	–	–	–
2-Hexanone	–	–	–
Toluene	–	–	–
Chlorobenzene	–	–	–
Ethylbenzene	–	–	–
Total Xylenes	–	–	–

Source - Ecology & Environment, Inc. (1988).

B Compound detected in blank samples.
J Estimated value. Result is less than the specified detection limit, but greater than zero.
– Not detected.
ppb Parts per billion.

A3

Table A-2. Summary of Semivolatile Organic Compounds Detected in Sediments and Soils from Dead Creek Sector B and Sites L and M, Sauget - Cahokia, Illinois.

	Sector B				
Sample Identification:	DC-SD-13	DC-SD-14	DC-SD-18	DC-SD-19	DC-SD-20
Sample Depth:	0-0.5ft	2-3ft	0-0.5ft	0-0.5ft	1.5-2ft
Sample Date:	11/5/86	11/5/86	11/5/86	11/5/86	11/5/86
Parameter (concentrations in ppb)					
Acenaphthene	-	-	-	-	-
4-Nitrophenol	-	2600 J	-	-	-
Diethylphthalate	-	-	-	-	-
Flourene	-	3900 J	-	-	-
Hexachlorobenzene	-	-	-	1900	210 J
Pentachlorophenol	-	-	-	940 J	370 J
Phenanthrene	-	15000 J	-	-	-
Di-n-butyl phthalate	-	-	300 J	-	280 J
Fluoranthene	-	11000 J	-	-	-
Pyrene	-	13000 J	1400 J	-	91 J
Butyl benzyl phthalate	-	-	830 J	-	-
Benzo(a)anthracene	-	-	430 J	-	-
bis(2-Ethylhexyl)phthalate	9900 J	9500 J	5300	-	95 J
Chrysene	-	-	1200 J	-	180 J
Di-n-octyl phthalate	-	2600 J	940 J	-	96 J
Benzo(b)fluoranthene	-	3400 J	-	2400	-
Benzo(k)fluoranthene	720 J	-	1500 J	-	410 J
Benzo(a)pyrene	1100 J	1800 J	490 J	310 J	95 J
Ideno(1,2,3-cd)perylene	-	-	850 J	1400 J	200 J
Dibenz(a,h)anthracene	-	-	-	390 J	-
Phenol	-	-	1400 J	1800 J	210 J
2-Chlorophenol	-	-	-	-	-
1,4-Dichlorobenzene	-	220000	-	-	-
1,2-Dichlorobenzene	-	17000 J	-	130 J	-
4-Methylphenol	-	-	-	-	-
Nitrobenzene	-	-	-	-	-
1,2,4-Trichlorobenzene	-	5400 J	-	390 J	76 J
Napthalene	400 J	9500 J	190 J	120 J	-
2-Methylnapthalene	-	8400 J	-	-	-

Source - Ecology & Environment, Inc. (1988).

B Compound detected in blank samples.
J Estimated value. Result is less than the specified detection limit, but greater than zero.
- Not detected.
ppb Parts per billion.

Table A-2. Summary of Semivolatile Organic Compounds Detected in Sediments and Soils from Dead Creek Sector B and Sites L and M, Sauget - Cahokia, Illinois.

	Site L				
Sample Identification:	DC-L1-02	DC-L2-03	DC-L3-04	DC-L4-09	DC-L4-10
Sample Depth:	5-10ft	5-15ft	5-15ft	10-20ft	10-20ft
Sample Date:	12/12/86	12/12/86	12/12/86	12/17/86	12/17/86
Parameter (concentrations in ppb)					
Acenaphthene	-	-	-	-	-
4-Nitrophenol	-	44 J	-	-	-
Diethylphthalate	-	-	-	-	310 J
Flourene	-	-	-	-	-
Hexachlorobenzene	-	-	-	-	-
Pentachloropnenol	-	11538	58228	-	-
Phenanthrene	-	602	1772 J	-	-
Di-n-butyl phthalate	171 J	372 J	2784	-	-
Fluoranthene	-	448	-	-	-
Pyrene	-	282 J	-	-	-
Butyl benzyl phthalate	-	-	-	-	-
Benzo(a)anthracene	-	-	911 J	-	-
bis(2-Ethylhexyl)phthalate	-	1217	-	750	1297
Chrysene	-	205 J	-	-	-
Di-n-octyl phthalate	-	-	-	-	-
Benzo(b)fluoranthene	-	-	-	-	-
Benzo(k)fluoranthene	-	-	-	-	-
Benzo(a)pyrene	-	-	-	-	-
Ideno(1,2,3-cd)perylene	-	-	-	-	-
Dibenz(a,h)anthracene	-	-	-	-	-
Phenol	-	346 J	1519 J	-	-
2-Chlorophenol	-	-	2152	-	-
1,4-Dichlorobenzene	-	-	215 J	-	-
1,2-Dichlorobenzene	-	-	-	-	-
4-Methylphenol	-	88 J	1089 J	-	-
Nitrobenzene	-	-	-	-	49 J
1,2,4-Trichlorobenzene	-	-	-	-	-
Napthalene	-	154 J	532 J	-	-
2-Methylnapthalene	-	333 J	1000 J	-	-

Source - Ecology & Environment, Inc. (1988).

B Compound detected in blank samples.
J Estimated value. Result is less than the specified detection limit, but greater than zero.
- Not detected.
ppb Parts per billion.

Table A-2. Summary of Semivolatile Organic Compounds Detected in Sediments and Soils from Dead Creek Sector B and Sites L and M, Sauget - Cahokia, Illinois.

	Site M		
Sample Identification:	DC-SD-15	DC-SD-16	DC-SD-17
Sample Depth:	0-0.5ft	0-0.5ft	0-0.5ft
Sample Date:	11/5/86	11/5/86	11/5/86
Parameter (concentrations in ppb)			
Acenaphthene	-	-	-
4-Nitrophenol	-	-	-
Diethylphthalate	-	-	-
Flourene	-	-	-
Hexachlorobenzene	-	-	-
Pentachlorophenol	-	-	-
Phenanthrene	-	-	-
Di-n-butyl phthalate	580 B	570 BJ	560 J
Fluoranthene	-	-	-
Pyrene	-	-	-
Butyl benzyl phthalate	-	-	-
Benzo(a)anthracene	-	-	-
bis(2-Ethylhexyl)phthalate	-	540 J	150 J
Chrysene	-	-	-
Di-n-octyl phthalate	120 J	270 J	-
Benzo(b)fluoranthene	-	-	-
Benzo(k)fluoranthene	-	-	-
Benzo(a)pyrene	-	-	-
Ideno(1,2,3-cd)perylene	-	-	-
Dibenz(a,h)anthracene	-	-	-
Phenol	-	-	-
2-Chlorophenol	-	-	-
1,4-Dichlorobenzene	-	-	-
1,2-Dichlorobenzene	-	-	-
4-Methylphenol	-	-	-
Nitrobenzene	-	-	-
1,2,4-Trichlorobenzene	-	-	-
Napthalene	-	-	-
2-Methylnapthalene	-	-	-

Source - Ecology & Environment, Inc. (1988).

B Compound detected in blank samples.
J Estimated value. Result is less than the specified detection limit, but greater than zero.
- Not detected.
ppb Parts per billion.

Table A-3. Summary of Pesticide and PCB Compounds Detected in Sediments and Soils from Dead Creek Sector B and Site M, Sauget - Cahokia, Illinois.

	Sector B				
Sample Identification:	DC-SD-13	DC-SD-14	DC-SD-18	DC-SD-19	DC-SD-20
Sample Depth:	0-0.5 ft	2-3 ft	0-0.5 ft	0-0.5 ft	1.5-2 ft
Sample Date:	11/5/86	11/5/86	11/5/86	11/5/86	11/5/86
Parameter (concentrations in ppb)					
Aroclor-1242	–	–	–	–	–
Aroclor-1248	–	480000 C	–	–	–
Aroclor-1254	–	–	–	141000 C	16000 C
Aroclor-1260	10300 J	66000 C	7700	54000 JC	5600 JC

Source - Ecology & Environment, Inc. (1988).

C	Result confirmed by gas chromatograph/mass spectrometer (GC/MS).
J	Estimated value. Result is less than the specified detection limit, but greater than zero.
–	Not detected.
ppb	Parts per billion.
PCBs	Polychlorinated biphenyls.

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Table A-3. Summary of Pesticide and PCB Compounds Detected in Sediments and Soils from Dead Creek Sector B and Site M, Sauget - Cahokia, Illinois.

	Site M		
Sample Identification:	DC-SD-15	DC-SD-16	DC-SD-17
Sample Depth:	0-0.5	0-0.5	0-0.5
Sample Date:	11/5/86	11/5/86	11/5/86
Parameter (concentrations in ppb)			
Aroclor-1242	–	20000	–
Aroclor-1248	660	8830	5200
Aroclor-1254	670	–	4200
Aroclor-1260	430 J	–	2700 J

Source - Ecology & Environment, Inc. (1988).

C	Result confirmed by gas chromatograph/mass spectrometer (GC/MS).
J	Estimated value. Result is less than the specified detection limit, but greater than zero.
–	Not detected.
ppb	Parts per billion.
PCBs	Polychlorinated biphenyls.

Table A-4. Summary of Inorganic Compounds Detected in Sediments and Soils from Dead Creek Sector B and Sites L and M, Sauget - Cahokia, Illinois.

	Sector B				
Sample Identification:	DC-SD-13	DC-SD-14	DC-SD-18	DC-SD-19	DC-SD-20
Sample Depth:	0-0.5 ft	2-3 ft	0-0.5 ft	0-0.5 ft	1.5-2 ft
Sample Date:	11/5/86	11/5/86	11/5/86	11/5/86	11/5/86
Parameters (concentrations in ppb)					
Aluminum	4800	6380	5380	9750	12900
Antimony	–	–	–	–	–
Arsenic	14 R	20 R	16 R	21	13 R
Barium	410	1110	467	17300	3120
Beryllium	–	–	–	–	–
Boron	–	–	–	–	–
Cadmium	22	36	24	30	8.2
Chromium, trivalent	62	153	79	118	113
Cobalt	6.6	9.2	6	11	6.9
Copper	8740 *	6700 *	8640 *	15300 *	2610 *
Iron	16400	19500	16300	58200	21300
Lead	853	931	983	1460	330
Magnesium	NA	NA	NA	NA	NA
Manganese	197	153	218	82	70
Mercury	0.73	1.3	0.9	1.68	0.89
Nickel	56 R*	502 R*	82	1520 R*	867 R*
Selenium	3.3	4.1	4	2	–
Silver	10	11	14	15	–
Thallium	–	–	–	4	–
Tin	32	28	–	16	–
Vanadium	23	27	24	48	25
Zinc	3310	6650	3410	11900	6610
Cyanide	–	3.8	–	–	–

Source - Ecology & Environment, Inc. (1988).

*	Duplicate analysis not within control limits.
R	Spike sample recovery not within control limits.
–	Not detected.
NA	Not analyzed.
ppb	Parts per billion.

Table A-4. Summary of Inorganic Compounds Detected in Sediments and Soils from Dead Creek Sector B and Sites L and M, Sauget - Cahokia, Illinois.

	Site L				
Sample Identification:	DC-L1-02	DC-L2-03	DC-L3-04	DC-L4-09	DC-L4-10
Sample Depth:	5-10 ft	5-15 ft	5-15 ft	10-20 ft	10-20 ft
Sample Date:	12/12/86	12/12/86	12/12/86	12/12/86	12/12/86
Parameter (concentrations in ppb)					
Aluminum	10897	5205	7380	1120	1378
Antimony	–	32	–	–	–
Arsenic	5 *	–	172	55 *	68 *
Barium	197	192	192	114	142
Beryllium	–	–	–	–	–
Boron	–	–	–	–	–
Cadmium	–	6	–	–	–
Chromium, trivalent	16	15	10	–	3
Cobalt	6	9	9	–	–
Copper	12	105	141	82	101
Iron	16053	5564	11899	1500	1446
Lead	9 *	106	41	5 *	5 *
Magnesium	NA	NA	NA	NA	NA
Manganese	255	44	149	10	10
Mercury	–	–	0.1	–	–
Nickel	21	406	2392	83	93
Selenium	–	–	–	–	–
Silver	–	–	–	–	–
Thallium	–	–	–	–	–
Tin	–	–	–	–	–
Vanadium	25	10	19	–	–
Zinc	59	144	166	11	10
Cyanide	NA	NA	NA	NA	NA

Source - Ecology & Environment, Inc. (1988).

*	Duplicate analysis not within control limits.
R	Spike sample recovery not within control limits.
–	Not detected.
NA	Not analyzed.
ppb	Parts per billion.

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Table A-4. Summary of Inorganic Compounds Detected in Sediments and Soils from Dead Creek Sector B and Sites L and M, Sauget - Cahokia, Illinois.

	Site M		
Sample Identification:	DC-SD-15	DC-SD-16	DC-SD-17
Sample Depth:	0-0.5 ft	0-0.5 ft	0-0.5 ft
Sample Date:	11/5/86	11/5/86	11/5/86
Parameter (concentrations in ppb)			
Aluminum	6560	2430	7510
Antimony	–	–	–
Arsenic	3.6 R	12 R	16 R
Barium	156	131	196
Beryllium	–	–	–
Boron	–	–	–
Cadmium	1.5	11	8
Chromium, trivalent	15	37	53
Cobalt	7.7	7.2	5
Copper	167 *	1270 *	1780 *
Iron	11100	26000	14400
Lead	26	65	71
Magnesium	NA	NA	NA
Manganese	100	97	139
Mercury	0.13	0.56	0
Nickel	356 R*	258 R*	309 R*
Selenium	–	–	–
Silver	–	–	–
Thallium	–	–	–
Tin	–	23	–
Vanadium	19	–	19
Zinc	868	872	1010
Cyanide	–	–	–

Source - Ecology & Environment, Inc. (1988).

*	Duplicate analysis not within control limits.
R	Spike sample recovery not within control limits.
–	Not detected.
NA	Not analyzed.
ppb	Parts per billion.

APPENDIX B

SAMPLE/CORE LOGS

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B

SAMPLE/CORE LOG

Boring/Well PA-B1 Project/No. NY 60503 Page 1 of 1

Site Location Dead Creek Drilling Started 10-18-91 0950 Drilling Completed 10-18-91 0910

Total Depth Drilled _____ feet Hole Diameter _____ inches Type of Sample/Coring Device _____

Length and Diameter of Coring Device _____ Sampling Interval _____ feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used _____ Drilling Method Hollow stem auge

Drilling Contractor _____ Driller F. Johnson Helper _____

Prepared By C. Jump Hammer Weight _____ Hammer Drop _____ inches

68' W of east fence line
West of channel

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0'	.5'			Dry dark brown sand & silt w/ roots, peaty
				60% recovery probably due to compression
.5'	1.0'			Tan, green, & orange stained spongy
				sediment; moist
1.0'	1.5'	SAMPLE PABI 0'-2'		Black spongy peatlike very stained
			11 ppm	sediment; wet
1.5'	2.5'			Grey & black stained silt spongy w/
				some clay & fine sand; wet
2.5'	3.5'			Grey very fine sand w/ clay & silt
				black stain
3.5'	5.0'			No recovery
5.0'	5.5'			Black & grey saturated very fine sand
5.5'	6.0'			Grey very fine sand w/ silt, black sta
6.0	8.5			Same as 5.5-6.0 but w/ decreasi
				black stain, occassional silt
				lenses & organic debris.
8.5	10.0			No recovery

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SAMPLE/CORE LOG

Boring/Well PAB2 Project/No. NY 60503 Page ____ of ____

Site Location Dead Creek Sector B Drilling Started 10-18-91 0310 Drilling Completed ____

Total Depth Drilled ____ feet Hole Diameter ____ inches Type of Sample/Coring Device ____

Length and Diameter of Coring Device ____ Sampling Interval ____ feet

Land-Surface Elev. ____ feet ☐ Surveyed ☐ Estimated Datum ____

Drilling Fluid Used ____ Drilling Method ____

Drilling Contractor Layne Western Driller F. Johnson Helper ____

Prepared By C. Jump Hammer Weight ____ Hammer Drop ____ inches

55' West of east fence line in creek bottom

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0'	.5'			Dry brown to dark brown silt & fine sand
.5'	1.5'			Dry black spongy peat-like sediment w/
				orange staining
1.5'	2.0'			Moist grey silt & clay w/ black sediment
				(like above) & stain.
2.0'	3.0'			Grey plastic clay w/ black stain; moist
3.0'	4.0'		SAMPLE PAB2 2'-4'	Grey silty clay w/ black stain & leaf
			8 ppm	debris, sticks, ...; moist
4.0'	5.0'			No recovery
5.0'	6.0'			Grey & black mottled silt w/ very fine
				sand x laminated @ 5.5'-6.0'; moist
6.0'	6.5'			Very fine black sand; moist
6.5'	7.5'			Moist grey & black silt w/ very fine sand
7.5'	8.0'			Moist grey clay w/ silt
8.0'	9.5'			Moist grey silty very fine sand w/
				x-laminations
9.5'	10.0'			Wet fine to med. sand interlayered
				w/ silt.

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SAMPLE/CORE LOG

Boring/Well PAB3 Project/No. _____ Page ____ of ____

Site Location Dead Creek B Drilling Started 10-15-91 1030 Drilling Completed 1055

Total Depth Drilled ____ feet Hole Diameter ____ inches Type of Sample/Coring Device _____

Length and Diameter of Coring Device _____ Sampling Interval ____ feet

Land-Surface Elev. ____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used _____ Drilling Method _____

Drilling Contractor _____ Driller F. Johnson Helper _____

Prepared By C. Jump Hammer Weight ____ Hammer Drop ____ inches

43' west of east fenceline
East of channel

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0'	.5'			Dry black spongy sed. w/ orange staining
				4" grey clay w/ black & orange stain
.5'	1.0'			Moist black spongy sed. w/ lots orange stain
1.0'	2.5'			Moist grey silty clay w/ orange staining
2.5'	4.0'			Grey silty clay w/ black mottles & organic
				debris; 5% very fine sand
4.0'	5.0'			No recovery
5.0'	8.5'			Moist to wet Grey silty very fine
				sand laminated & black staining.
				Some localized high clay content
				zones
			PAB3	5'-6' Sample
8.5	9.0'			Fine to med. grey sand

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SAMPLE/CORE LOG

Boring/Well PB B1 Project/No. NY 60503 Page ____ of ____

Site Location ____ Drilling Started 10-18-91 1235 Drilling Completed 1255

Total Depth Drilled ____ feet Hole Diameter ____ inches Type of Sample/Coring Device ____

Length and Diameter of Coring Device ____ Sampling Interval ____ feet

Land-Surface Elev. ____ feet ☐ Surveyed ☐ Estimated Datum ____

Drilling Fluid Used ____ Drilling Method HS Auger

Drilling Contractor Layne Western Driller F. Johnson Helper ____

Prepared By C. Jump Hammer Weight ____ Hammer Drop ____ inches

In creek bottom

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0'	.5'			Dry brown peat-like spongy sed.
.5'	1.5'			Moist black & grey silt, highly stained,
				oily sheen Greenish black stain @
				.5' interface
1.5'	3.0'			Moist grey silty clay w/ black staining
				& minor organic debris
				PE-B1 0'-2' Sample 25 ppm
3.0'	5.0'			Moist grey clayey silt w/ black staining
5.0'	9.5'			Moist grey silt w/ very fine sand
				and black staining grading to
				very fine sand laminated & x laminated
				w/ organic debris
9.5'	10.0'			Moist fine to med. grey sand

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SAMPLE/CORE LOG

Boring/Well PB-B2 Project/No. _____ Page ____ of ____

Site Location Dead Creek Drilling Started 10-18-91 1300 Drilling Completed _____

Total Depth Drilled ____ feet Hole Diameter ____ inches Type of Sample/Coring Device _____

Length and Diameter of Coring Device _____ Sampling Interval ____ feet

Land-Surface Elev. ____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used _____ Drilling Method _____

Drilling Contractor _____ Driller F. Johnson Helper _____

Prepared By C. Lump Hammer Weight ____ Hammer Drop ____ inches

44' West of East fenceline
East of channel

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0'	1'			Dry brown to black spongy sed. w/ lots orange stain laminated.
1'	1.5'			Orange spongy sed. w/ black bands; mois
1.5'	3.0'			Moist grey silty clay w/ orange stain & minor black stain
3.0'	5.0'			Moist grey silty clay to clayey silt w/ very fine sand black stain & organic debris
5.0'	9.0'			Moist black & grey very fine sand and silt localized bands w/ higher clay content.
9.0'	10.0'			Wet med. to fine dark grey sand grading to fine sand.
				Sample PB-B2 4'-6' 2 ppm

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SAMPLE/CORE LOG

Boring/Well PB 33 Project/No. _____ Page ____ of ____

Site Location Dead Creek 13 Drilling Started 10-15-91 1340 Drilling Completed 1400

Total Depth Drilled ____ feet Hole Diameter ____ inches Type of Sample/Coring Device _____

Length and Diameter of Coring Device _____ Sampling Interval ____ feet

Land-Surface Elev. ____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used _____ Drilling Method HS Auger

Drilling Contractor Layne - Western Driller F. Johnson Helper _____

Prepared By C. Jump Hammer Weight ____ Hammer Drop ____ inches

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0'	.5'			Dry orange-brown spongy peat-like sed.
.5'	2.0'			Moist black spongy peat-like sed w/
				orange stain
2.0'	2.5'			Tan to grey silt w/ orange stain; mois
2.5'	3.5'			Tan to grey silt w/ increasing orange
				stain; moist
3.5'	5.0'			Grey very fine silty sand w/ minor
				black staining; moist
5.0'	7.0'			Moist grey & black silt and very
				fine sand
7.0'	8.0'			Grey silty clay w/ black staining
8.0'	8.5'			Grey to dark grey fine sand w/
				bl. stain; moist
8.5'	10'			Grey to dark grey silty fine sand
				w/ black staining grading to
				med. sand at base, wet.

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SAMPLE/CORE LOG

Boring/Well PC-B1 Project/No. NY 60503 Page ___ of ___

Site Location Dead Creek Drilling Started 10-21-91 0900 Drilling Completed 0930

Total Depth Drilled 10' feet Hole Diameter ~~8 1/4" OD~~ 4 1/4" ID inches Type of Sample/Coring Device cont. sampler

Length and Diameter of Coring Device 4" dia 5' cont. sampler Sampling Interval cont. feet

Land-Surface Elev. ___ feet ☐ Surveyed ☐ Estimated Datum ___

Drilling Fluid Used ___ Drilling Method Hollow stem

Drilling Contractor Layne - Western Driller Frank Johnson Helper ___

Prepared By TGT Hammer Weight ___ Hammer Drop ___ inches

Ambient Air 0-3 ppm

	Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
	0'	5'	4.5'	0'-1.5'	Gray to dark black sandy silt
0915					w/ wood and rubber (fill) 0 ppm
				1.5'-4.5'	Dark gray silty clay w/ lignite
					and limonite stains and wood
					chips 0 ppm
0925	5'	10'	4.5'		5'-8' Gray silty clay w/ limonite
					stains and dark black staining 0 p
					8'-9.5' Gray medium grained
					sand w/ small gray clay nodules
					GW @ 9.5'
					Center of channel

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SAMPLE/CORE LOG

Boring/Well PC B2 Project/No. NY 60503 Page 1 of 1

Site Location Dead Creek Drilling Started 945 Drilling Completed 1000 Bottles 1000

Total Depth Drilled 10 feet Hole Diameter ~~8 1/4"~~ 4 1/4" inches Type of Sample/Coring Device cont. sampler

Length and Diameter of Coring Device 4" 5' cont. sampler Sampling Interval cont. feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used _____ Drilling Method Hollow stem

Drilling Contractor Layne - Western Driller Frank Johnson Helper _____

Prepared By TGT Hammer Weight _____ Hammer Drop _____ inches

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0'	5'	4.5		0'-1' Gray sandy silt w/ vegetable matter and rust colored staining (FILL) 0 ppm
				1'-4.5' Gray silty clay w/ brown mottling and many fine to medium roots, w/ limonite stains 0 ppm
		4.5'		
5'	10'			5'-7.5' Gray sandy clayey silt w/ lignite and limonite stains. Alternating light & dark gray banding at the bottom
				7.5'-8.5' light gray silty clay w/ limonite stains 0 ppm
				8.5'-9.5' Gray medium grained sand w/ some coarse grained to pebble size fragments.
				NO GW
				East of channel

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SAMPLE/CORE LOG

Boring/Well PC-B3 Project/No. NY 60503 Page 1 of 1

Site Location Dead Creek Drilling Started 10-21-91 1000 HRS Drilling Completed 10-21-91 1020 HRS

Total Depth Drilled 10 feet Hole Diameter 5 1/4 OD 4 1/4 ID inches Type of Sample/Coring Device BOTTLES 1015

Length and Diameter of Coring Device 4" 5' cont. sampler Sampling Interval ____ cont. feet

Land-Surface Elev. ____ feet ☐ Surveyed ☐ Estimated Datum ____

Drilling Fluid Used N/A Drilling Method Hollow Stem

Drilling Contractor Layne Western Driller F. Johnson Helper ____

Prepared By TGT Hammer Weight ____ Hammer Drop ____ inches

	Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
005	0'	5'	4.5	0'-1'	Brown and gray silty clay,
					crumbly where dry w/ wood (FILL)
				1'-4.5'	Gray silty clay w/ lignite stains,
					rust mottling on ped surfaces, man
					roots, and wood fragments. 0 ppm
1015	5'	10'	4.5	5'-6.5'	Gray sandy silty clay w/ wood 0 pp
				6.5'-8.5'	Gray sandy silty clay w/ light
					and dark gray banding 0 ppm
				8.5'-9.5'	Gray silty clay w/ lignite stains 0
					GW @ 10'
					East of channel

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SAMPLE/CORE LOG

Boring/Well PD-B1 Project/No. NY 60503 Page 1 of

Site Location Dead Creek Sector B Drilling Started 10-21-91 1200 HRS Drilling Completed 10-21-91 1220

Total Depth Drilled _____ feet Hole Diameter ~~3 1/4~~ 4 1/4 ID OD inches Type of Sample/Coring Device 4" 5' cont. sampler Bottles 1215

Length and Diameter of Coring Device 4" dia. 5' cont. sampler Sampling Interval _____ cont. feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used N/A Drilling Method Hollow Stem

Drilling Contractor Layne-Western Driller F. Johnson Helper Rick Steve

Prepared By TGT Hammer Weight _____ Hammer Drop _____ inches

Ambient Air = 0-3 ppm

	Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
1205	0'	5'	3.5'		0'-1.25' Dark black and green sandy silt w/ petroleum odor and vegetable matter. FILL 12 ppm
					1.25-3.5' Gray silty clayey fine grained sand w/ wood chips 5 ppm
1215	5'	10'			5'-6' Black silty clayey sand w/ wood 4-5 ppm
					6'-7' Gray sandy silty clay w/ lignite stains 4-5 ppm
					7'-8' Gray silty medium grained sand w/ vegetable matter 4 ppm
					GW @ 6'
	PD-B1 MS/MSD taken @ 0-1.5' taken for				
	TCL VOC ; TCL SVOC/Pest/PCB ; TAL Metals/CN				
	Headspace sample PD-B1 0'-1.5' 30 ppm				
	Center of channel				

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SAMPLE/CORE LOG

Boring/Well PD-B2 Project/No. NY 60503 Page 1 of 1

Site Location Dead Creek Sector B Drilling Started 10-21-91 1225 Drilling Completed 10-21-91 1240 Bottles 1230

Total Depth Drilled 10 feet Hole Diameter ~~8 1/4" OD~~ 4 1/4" ID inches Type of Sample/Coring Device 4" dia S

Length and Diameter of Coring Device 4" dia. 5' cont. sampler Sampling Interval cont. feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used N/A Drilling Method Hollow stem

Drilling Contractor Layne-Western Driller F. Johnson Helper Rick Steve

Prepared By TGT Hammer Weight _____ Hammer Drop _____ inches

Ambient 0-3 ppm

	Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
1230	0'	5'	4'		0'-1' Brown and rust colored sandy
					silt w/ alot of vegetable matter
					FILL 4-5 ppm
					1'-4' Gray sandy silty clay w/
					brown staining on ped surfaces,
					lignite stains, and wood chips 4 pp
1237	5'	10'	4.5'		5'-6.5' Gray silt clay w/ wood 4 ppm
					6.5-9.5' Gray silty medium grained
					sand w/ wood chips 3-4 ppm
					GW @ ~10'
				PD-B2	MS/MSD taken @ 2'-4'
					for TAL Metals and TCL PCBs
				headspace sample	PD-B2 2'-4'
					East of channel

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SAMPLE/CORE LOG

Boring/Well PD-B3 Project/No. NY 60503 Page 1 of

Site Location Dead Creek Sector B Drilling Started 10-21-91 1245 HRS Drilling Completed 10-21-91 1310 ~~Bottles~~ 130

Total Depth Drilled 10 feet Hole Diameter ~~8 1/4~~ 4 1/4 ID inches Type of Sample/Coring Device cont. sampler

Length and Diameter of Coring Device 4" dia 5' cont. sampler Sampling Interval cont. feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used N/A Drilling Method Hollow stem

Drilling Contractor Layne-Western Driller Frank Johnson Helper Rick Steve

Prepared By TGT Hammer Weight _____ Hammer Drop _____ inches

Ambient 0-3 ppm

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
.50 0'	5'	4.5'		0'-1' Brown and grey sandy silt
				w/ alot of vegetable matter and
				metal FILL 0 ppm
				1'-4.5' Gray silty clay w/ rust
				coloring on ped surfaces and
				black staining, Lignite stains and
				wood chips 0 ppm
2.57 5'	10'	4'		5'-9' Gray silty clayey sand w/
				black staining that makes it
				appear banded 4 ppm
				GW @ 10'
		Headspace		sample PD-B3 4'-6' 3 ppm
			East	of channel.

G&M Form 03 6-86

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B.3

SAMPLE/CORE LOG

Boring/Well PE-B1 Project/No. NY 6C503 Page 1 of 1

Site Location Dead Creek Sector B Drilling Started 10-21-91 1320 HRS Drilling Completed 10-21-91 1350 HRS ~~Bottles~~ 1345

Total Depth Drilled 10 feet Hole Diameter ~~8¼ OD~~ 4¼ ID inches Type of Sample/Coring Device Cont. sampler

Length and Diameter of Coring Device 4" dia 5' cont. sampler Sampling Interval cont. feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used N/A Drilling Method Hollow stem

Drilling Contractor Layne Western Driller Frank Johnson Helper Rick Steve

Prepared By TGT Hammer Weight _____ Hammer Drop _____ inches

Ambient Air 0-3 ppm

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0'	5'	4.0'		0'-1.5' Brown, black, & rust colored sandy silt w/ brick, wood, and vegetable matter FILL 5 ppm
				1.5'-3.0' Gray silty clay w/ wood and black staining 3-4 ppm
				3.0'-4.0' Gray silty clayey fine grained sand w/ black staining and wood. 3-4 ppm
5'	10'	4.5'		5'-6.5' Gray sandy silty clay w/ black staining and wood; supersatura 4 p
				6.5'-7.5' Gray silty clay w/ lignite and black staining 3 ppm
				7.5'-9.5' Dark gray to black clayey medium grained sand 3 pp
				GW @ 5.5' Perched?
				GW @ 10'
				Headspace sample PE-B1 0'-2' 12 ppm
				Center of channel

G&M Form 03 6-86 Southform 89-1257

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SAMPLE/CORE LOG

Boring/Well PE-B2 Project/No. NY 60503 Page 1 of 1

Site Location Dead Creek Sector B Drilling Started 10-21-91 1400 HRS Drilling Completed 10-21-91 1430 HRS

Total Depth Drilled 10 feet Hole Diameter ~~8 1/4~~ 4 1/4 ID inches Type of Sample/Coring Device cont. sampler Bottles 1415

Length and Diameter of Coring Device 4" dia. 5' cont. sampler Sampling Interval cont. feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used N/A Drilling Method Hollow stem

Drilling Contractor Layne-Western Driller F. Johnson Helper Steve Rick

Prepared By TGT Hammer Weight _____ Hammer Drop _____ inches

Ambient Air 0-3 ppm

	Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
1415	0'	5'	4'		0'-1.25' Gray, black, and rust colored sandy silt w/ vegetable matter. FILL ppm
					1.25'-4.0' Gray silty clay w/ lignite stains, wood, and black staining ppm
1421	5'	10'	4.25'		5'-6.5' Gray sandy silty clay w/ limonite lignite stains, wood, and black staining 4 ppm
					6.5'-7.5' Gray silty clay w/ limonite & lignite stains, wood, and black staining 4 ppm
					7.5'-9.25' Gray clayey silty medium grained sand w/ thin black banding & wood 4 ppm
					NO GW
					Headspace sample PE-B2 4'-6' 4 ppm
					East of channel

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SAMPLE/CORE LOG

Boring/Well PE-B3 Project/No. NY 60503 Page 1 of

Site Location Dead Creek Sector B Drilling Started 10-21-91 1430 HRS Drilling Completed 10-21-91 1500 HRS Bottles 1445

Total Depth Drilled 10 feet Hole Diameter ~~3 1/4 OD~~ 4 1/4 ID inches Type of Sample/Coring Device cont. sampler

Length and Diameter of Coring Device 4" dia 5' cont. sampler Sampling Interval cont. feet

Land-Surface Elev. feet ☐ Surveyed ☐ Estimated Datum

Drilling Fluid Used N/A Drilling Method Hollow stem

Drilling Contractor Layne Western Driller F. Johnson Helper Rick Steve

Prepared By TGT Hammer Weight Hammer Drop inches

	Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
5	0'	5'	4'		0'-1.0' Gray, green, and rust colored sandy silt w/ vegetable matter and wood (FILL) 4 ppm
					1'-4.0' Gray sandy silty clay w/ rust staining on ped surfaces, limonite and lignite stains, and wood. 4 ppm.
44	5'→10'		4'		5'-6.5' Dark grey silty clayey fine grained sand w/ black staining as bands 3-4ppm
					6.5'-7.0' Light grey silty clay w/ lignite stains 3 ppm
					7.0'-8.0' Gray medium grained silty sand w/ off white staining 3 ppm
					8.0'-8.75' Light gray silty clay w/ lignite stains 3 ppm
					8.75'-9.0' Gray med. grained sand 3 ppm
					Headspace sample PE-B3 2'-4' is 3 ppm
					East of channel
					GW @ 9.0'-9.5'

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SAMPLE/CORE LOG

Boring/Well PF-B1 Project/No. NY 60503 Page 1 of 1

Site Location Dead Creek Sector B Drilling Started 10-22-91 1045 Drilling Completed 10-22-91 1105

Total Depth Drilled 10 feet Hole Diameter 4 1/4 ID 5 1/4 OD inches Type of Sample/Coring Device Cont. Sampler Bottles 1100

Length and Diameter of Coring Device 4" dia 5' cont. sampler Sampling Interval ~~cont.~~ feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used N/A Drilling Method Hollow stem

Drilling Contractor Layne - Western Driller F. Johnson Helper Rick Steve

Prepared By TGT Hammer Weight _____ Hammer Drop _____ inches

	Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
955	0'	2.5'	2'		Dark black sandy silt w/ a very greasy feeling and anaerobic odor. 0-2 ppm High moisture content (FILL/SED)
					This sample taken by hand w/ a 3" 2' spoon because ATV got stuck.
					Headspace sample of PF-B1 0'-2' is 0-2 PP
					Lunch
145	2'	4'	1.5'		Gray silty clay w/ limonite and lignite stains. Black staining & wood also present. 0-2 ppm
					West of creek channel
					GW @ 3'

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SAMPLE/CORE LOG

Boring/Well PF-B2 Project/No. NY 60503 Page 1 of

Site Location Dead Creek Sector B Drilling Started 10-22-91 0945 Drilling Completed 10-22-91 1030

Total Depth Drilled _____ feet Hole Diameter ~~5 1/4~~ 4 1/4 OD ID inches Type of Sample/Coring Device Cont. Sampler Bottles

Length and Diameter of Coring Device 4" dia 5' cont. sampler Sampling Interval cont. _____ feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used N/A Drilling Method Hollow stem

Drilling Contractor Layne - Western Driller Frank Johnson Helper Rick Steve

Prepared By TGT Hammer Weight _____ Hammer Drop _____ inches

Ambient Air = 0-2 ppm

	Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
1_5	0'	5'	4'		0'-1' Gray, green, and black sandy silt w/ orange staining and greasy feel. Contains a fair amount of vegetable matter. (FILL/SEDIMENT) 0
					1'-4' Light gray sandy silt clay with limonite and lignite stains, wood, and black staining. 0-2 p
					Moderate moisture content to high M.C
020	5'	10'	4.5'		5'-6.5' Gray silty sandy clay w/ wood, lignite stains, and black staining 0-2 ppm
					6.5'-9.5' Gray sandy silty clay w/ wood. 0-2 ppm
					GW @ 5'
					Boring slightly east of creek
					Headspace sample PF-B2 2'-4' 0-2 ppm

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SAMPLE/CORE LOG

Boring/Well PF-B3 Project/No. NY 60503 Page 1 of 1

Site Location Dead Creek Sector B Drilling Started 10-22-91 0900 Drilling Completed 10-22-91 0940

Total Depth Drilled _____ feet Hole Diameter 8¼ 4¼ ID inches Type of Sample/Coring Device cont. sampler Bottles Q93

Length and Diameter of Coring Device 4" dia 5' cont. sampler Sampling Interval cont. _____ feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used N/A Drilling Method Hollow stem

Drilling Contractor Layne - Western Driller Frank Johnson Helper Rick Steve

Prepared By TGT Hammer Weight _____ Hammer Drop _____ inches

Ambient Air = 0 ppm - 2 ppm

	Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0910	0'	5'	3'		0'-1' Black, green sandy silt w/ greasy feel and orange staining 0 ppm (FILL/SED).
					1'-3' Light gray sandy silty clay w/ limonite and lignite stains, wood, and black staining 0 ppm
0920	5'	10'	4'		5'-9' Light gray clayey sandy silt w/ lignite stains and wood. Black staining appears as banding. Medium moisture content, very wet @ 5'. 0 ppm
					GW @ 5'
					Boring farthest east of creek channel.
					Headspace sample PF-B3 4'-6' 0-2ppm

G&M Form 23 6 86 Southport 89-257

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SAMPLE/CORE LOG

Boring/Well PG-B1 Project/No. NY 60503 Page 1 of 1

Site Location Dead Creek Sector 3 Drilling Started 10-22-91 1330 Drilling Completed 10-22-91 1430

Total Depth Drilled _____ feet Hole Diameter 3" inches Type of Sample/Coring Device 3" split spoon Bottles 140

Length and Diameter of Coring Device 2' long 3" dia. split spoon Sampling Interval cont. feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used N/A Drilling Method Hand spooning

Drilling Contractor Layne - Western Driller T&L Helper TGT

Prepared By TGT Hammer Weight _____ Hammer Drop _____ inches

By hand

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0'	2'	2'		Gray, black, and rust colored clayey silt w/ greasy feel, wood, & vegetable matter (FILL/SED) Submerged boring; GW @ 6" above 0'. 0-2 ppm
2'	3.5'	1'		Gray sandy silty clay w/ lignite and limonite stains, wood, & black staining. 0-2 ppm
			Headspace sample	PG-B1 0'-2' 0-2 ppm

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SAMPLE/CORE LOG

Boring/Well PG-B2 Project/No. NY 60503 Page 1 of 1

Site Location Dead Creek Sector B Drilling Started 10-23-91 0920 Drilling Completed 10-23-91 0930

Total Depth Drilled _____ feet Hole Diameter ~~8 1/4 OD~~ 4 1/4 ID inches Type of Sample/Coring Device cont. Bottles sampler 0930

Length and Diameter of Coring Device 5' long 4" dia. cont. sampler Sampling Interval cont. feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used N/A Drilling Method Hollow stem

Drilling Contractor Layne Western Driller F. Johnson Helper Rick Steve

Prepared By TGT Hammer Weight _____ Hammer Drop _____ inches

Ambient Air . 0 ppm

	Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0925	0'	5'	3.5'		0'-.75' Gray, green, and black sandy silt w/ orange staining and some vegetable matter. (FILL/SED). 0 ppm
					.75'-3.5' Light gray sandy silty clay w/ rust colored staining on ped surfaces, lignite and limonite stains, and wood. 0 ppm
					GW @ 2.0'-2.5'
					Sample just east of channel
					Headspace sample PG-B2 2'-4' is 0

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SAMPLE/CORE LOG

Boring/Well PG-B3 Project/No. NY 60503 Page 1 of

Site Location Dead Creek Sector B Drilling Started 10-23-91 0945 Drilling Completed 0945

Total Depth Drilled _____ feet Hole Diameter 4 1/4 ID 3 1/4 OD inches Type of Sample/Coring Device cont. Bottles sampler 09CC

Length and Diameter of Coring Device 4" dia 5' long Sampling Interval cont. feet

Land-Surface Elev _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used N/A Drilling Method Hollow stem

Drilling Contractor Layne Western Driller F. Johnson Helper Rick Steve

Prepared By TGT Hammer Weight _____ Hammer Drop _____ inches

Ambient Air 0 ppm

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0'	5'	4.5'		0'-.5' Black and brown clayey sandy silt w/ an abundance of vegetable matter (FILL/SED) 0 ppm
				.5'-2.5' Light gray silty clay w/ lignite and limonite stains 0 ppm
				2.5'-4.0' Light gray sandy silty clay w/ lignite & limonite stains & rust staining on ped surfaces 0 ppm
				4.0'-4.5' Dark grey sandy silty clay w/ black staining. 0 ppm
5.0'	10.0'	4.0'		5.0'-9.0' Gray silty fine to medium grained sand w/ lignite stains, wood, and black staining. 0 ppm
				GW @ 4.5'-5.0'

Sample farthest east

Headspace sample PG-B3 4'-6' is 0 ppm.

GM Form 103 5-86

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SAMPLE/CORE LOG

Boring/Well PH-B1 Project/No. NY 60503 Page 1 of 1

Site Location Dead Creek Sector B Drilling Started 10-23-91 1030 Drilling Completed 10-23-91 1100 ~~Bottles~~ 1045

Total Depth Drilled _____ feet Hole Diameter 3" inches Type of Sample/Coring Device split spoon

Length and Diameter of Coring Device 3" dia 2' long split spoon Sampling Interval cont. feet

Land-Surface Elev _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used N/A Drilling Method Hand spooning

Drilling Contractor Layne-Western Driller Frank Johnson Helper Rick Steve

Prepared By TGT Hammer Weight _____ Hammer Drop _____ inches

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0'	2'			0'-1.5' Black and brown sandy silt stained black in areas, wood, vegetable matter, and greasy feel. (FILL/SED) 0 ppm
				1.5'-2.0' Light gray silty clay w/ lignite and limonite stains, wood, and rust coloring on ped surfaces. 0 ppm
				Sample in creek channel; GW @ +1.0'
				1' Above 0' on sample; Headspace sample PH-B1 0'-2' is 0-1 ppm

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SAMPLE/CORE LOG

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Boring/Well PH-B2 Project/No. NY 60503 Page 1 of

Site Location Dead Creek Sector B Drilling Started 10-23-91 1015 Drilling Completed 10-23-91 1030 ~~Bottles~~ 1020

Total Depth Drilled _____ feet Hole Diameter ~~3 1/4 OD~~ 4 1/4 ID inches Type of Sample/Coring Device cont. sampler

Length and Diameter of Coring Device 4" dia 5' long continuous sampler Sampling Interval continuous feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used N/A Drilling Method Hollow stem

Drilling Contractor Layne-Western Driller Frank Johnson Helper Rick Steve

Prepared By TGT Hammer Weight _____ Hammer Drop _____ inches

Ambient Air 0 ppm

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0'	5'	4.0'		0'-.5' Black sandy silt w/ vegetable matter (FILL/SED) and black staining ppm
				.5'-3.0' Light gray silty clay w/ lignite and limonite stains, rust colored stains on ped surfaces, and wood 0 ppm
				3'-4' Dark gray silty sand fine to medium gr. w/ wood and black staining. 0 ppm
				GW @ 2.5'-3.0'
				Headspace sample PH-B2 2'-4' is 0
				Sample just east of creek channel.

G&M Form 33 6 86 Soumont 59-1257

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SAMPLE/CORE LOG

Boring/Well PH-B3 Project/No. NY 6C503 Page 1 of 1

Site Location Dead Creek Sector 3 Drilling Started 10-23-91 0948 Drilling Completed 10-23-91 1015 ~~3 bottles~~ CCC

Total Depth Drilled _____ feet Hole Diameter 4 1/4 ID 8 1/4 OD inches Type of Sample/Coring Device cont. sampler

Length and Diameter of Coring Device 4" dia 5' long cont. sampler Sampling Interval continuous feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used N/A Drilling Method Hollow stem

Drilling Contractor Layne-Western Driller Frank Johnson Helper Rick Steve

Prepared By TGT Hammer Weight _____ Hammer Drop _____ inches

Ambient Air 0 ppm

	Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
1955	0'	5'	4.25'		0'-.5' Black sandy silt w/ an abundance of vegetable matter (FILL/SED) 0 ppm
					.5'-2.5' Light gray silty clay w/ limonite stains, rust coloring on pebd surfaces, & wood. 0 ppm
					2.5'-3.5' Light gray sandy clay w/ limonite stains, black staining, & wood. 0 ppm
2003	5'	10'	3.5'		5'-6' Gray sandy clay w/ limonite stains 0 ppm
					6'-8.5' Gray clayey silty fine to medium grained sand w/ black staining. 0 ppm
					Headspace sample PH-B3 4'-6' is 0 ppm
					Sample farthest west
					GW @ 5'.

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SAMPLE/CORE LOG

Boring/Well PI-B1 Project/No. NY 60503 Page 1 of 1

Site Location Dead Creek Sector B Drilling Started 10-24-91 1230 Drilling Completed 10-24-91 1245

Total Depth Drilled _____ feet Hole Diameter 3" inches Type of Sample/Coring Device split spoon

Length and Diameter of Coring Device 3" dia 1.5' or 2.0' split spoons Sampling Interval cont. feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used N/A Drilling Method Hand spooning

Drilling Contractor Layne-Western Driller Frank Johnson Helper Rick Steve

Prepared By TGT Hammer Weight _____ Hammer Drop _____ inches

Ambient Air 0-1 ppm

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
3'	5'			Gray silty clay w/ lignite and
				limonite stains, wood, and black
				staining. 0-1 ppm
				GW @ 2.0'
				Headspace sample PI-B1 3'-5' is 1-2 p
				Boring west of creek channel.

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SAMPLE/CORE LOG

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Boring/Well PI-B2 Project/No. NY 60503 Page 1 of 1

Site Location Dead Creek Sector B Drilling Started 10-24-91 1205 Drilling Completed 10-24-91 1215

Total Depth Drilled _____ feet Hole Diameter 3" inches Type of Sample/Coring Device split spoon

Length and Diameter of Coring Device 3" dia 2' split spoon Sampling Interval continuous feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used N/A Drilling Method Hand sampling

Drilling Contractor Layne Western Driller Frank Johnson Helper Rick Steve

Prepared By TGT Hammer Weight _____ Hammer Drop _____ inches

Ambient Air 0-1 ppm

	Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
1207	0'	1.5'	.25'		0'-.25' Black sandy silt w/ greasy feel and organic matter. (FILL/SED) 1-3 p.
1212	1.5'	3.5'	1.5'		1.5'-2.0' Black sandy silt w/ greasy feel and organic matter. (FILL/SED) 0-1 ppm
					2.0'-3.0' Gray silty clay w/ lignite stains, wood, and black staining 0-1 ppm
					GW @ 1.5'-2.0'
					Headspace sample PI-B2 0'-2' is 0-3 ppm
					In creek channel

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SAMPLE/CORE LOG

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Boring/Well PI-B3 Project No. NY 6C5C3 Page 1 of

Site Location Dead Creek Sector B Drilling Started 10-24-91 1220 Drilling Completed 10-24-91 1230

Total Depth Drilled _____ feet Hole Diameter 3 inches Type of Sample/Coring Device split spoon

Length and Diameter of Coring Device 3" dia. 2' split spoon Sampling Interval cont. feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used N/A Drilling Method Hand spooning

Drilling Contractor Layne-Western Driller _____ Helper Rick Steve

Prepared By TGT Hammer Weight _____ Hammer Drop _____ inches

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
1.5'	3.0'	1.5'		Gray sandy silty clay w/ lignite stains, wood, and black staining. 0 ppm
				Rust colored staining on ped surfaces.
				GW @ 2'
				Headspace sample PI-B3 1.5'-3.0' 0-1.
				Sample east of creek channel.

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SAMPLE/CORE LOG

Boring/Well PJ-B1 Project/No. NY 60503 Page 1 of 1

Site Location Dead Creek - Sector B Drilling Started 10-24-91 1315 Drilling Completed 10-24-91 1340

Total Depth Drilled _____ feet Hole Diameter 3 inches Type of Sample/Coring Device split spoon

Length and Diameter of Coring Device 3" dia. 1.5' or 2.0' split spoon Sampling Interval cont. feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used N/A Drilling Method Hand spooning

Drilling Contractor Layne - Western Driller Frank Johnson Helper Rick Steve

Prepared By TGT Hammer Weight _____ Hammer Drop _____ inches

Ambient Air 0-1 ppm.

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
1335 3'	5'	1.75'		Gray silty clay w/ lignite and limonite stains, wood, and black staining. 0-1 ppm. GW @ 2.0'
				Headspace sample PJ-B1 3'-5' is 0-1; Sample west of creek channel

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SAMPLE/CORE LOG

Boring/Well PJ-32 Project/No. NY 60503 Page 1 of

Site Location Dead Creek Sector B Drilling Started 10-24-91 1250 Drilling Completed 10-24-91 1300

Total Depth Drilled _____ feet Hole Diameter 3 inches Type of Sample/Coring Device split spoon

Length and Diameter of Coring Device 3" dia 1.5' or 2.0' split spoon Sampling Interval cont. feet

Land-Surface Elev _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used N/A Drilling Method Hand spooning

Drilling Contractor Layne - Western Driller Frank Johnson Helper Rick Steve

Prepared By TGT Hammer Weight _____ Hammer Drop _____ inches

Ambient Air 0-1 ppm

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0'	1.5'	1.5'		Black sandy silt w/ greasy feel, vegetable matter, and wood. (FILL/SED). 0-1 ppm
				GW @ 1.5'-2.0'
				Headspace sample PJ-B2 0'-1.5' is 0-2
				Sample in creek channel.

3M Form 33 5 86 Southern Region

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SAMPLE/CORE LOG

Boring/Well PJ-B3 Project/No. NY 60503 Page 1 of 1

Site Location Dead Creek - Sector B Drilling Started 10-24-91 1300 Drilling Completed 10-24-91 1315

Total Depth Drilled _____ feet Hole Diameter 3 inches Type of Sample/Coring Device split spoon

Length and Diameter of Coring Device 3" dia Sampling Interval cont. feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used N/A Drilling Method Hand spooning

Drilling Contractor Layne - Western Driller Frank Johnson Helper Rick Steve

Prepared By TGT Hammer Weight _____ Hammer Drop _____ inches

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
307 1.5'	3.0'			1.5' - 2.75' Gray silty clay w/ lignite
				and limonite stains, wood, and
				black staining. 0 - 1 ppm
				GW @ 2.0'
				Headspace sample PJ-B3 1.5' - 3.0' is 0-1,
				Sample east of creek channel.

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SAMPLE/CORE LOG

Boring/Well: B2 Project/No. NY6550- Page 1 of 1

Site Location: S-2 L Drilling Started: 9-4-91 13:30 Drilling Completed: 10-14-91 17:00

Total Depth Drilled: 14.5 feet Hole Diameter: 6 inches Type of Sample/Coring Device: Split-spoon

Length and Diameter of Coring Device: 2' Sampling Interval: 5 - 14.5 feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used _____ Drilling Method: 4 1/4 ID Augers

Drilling Contractor: Laure Western Driller: Frank Johnson Helper _____

Prepared By: Chris Jump Hammer Weight: 140 lbs. Hammer Drop: 30 inches

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0		—	—	Dark Brown Cinder Fill. Dry
2.5	5.0	—	—	Black sludgy silt fill w/ ≈10% sand. Wood and
				rubber chips. Petroleum & rubber odor. Odor and
				oiliness increase downward. Moist
5.0	7.0	5%	4-4-1-3	Dark Grey Cinder Fill. Dry
7.0	7.5	100%	3	Tarry sludge oily. Strong Petro. & Rubber odor.
7.5	8.25	100%	5-7	Tan silty fine sand with black to grey stain.
8.25	8.75	75%		Black oil stained silty sand; Petro & rubber odor.
8.75	9.0	100%		Tan silty sand
9.0	9.5	100%	1	Tan and grey micaceous silt with Fe stain. Strong [illegible]
9.5	10.0	100%	1	V. Fine sand w/ bands of black sludgy staining. Petro [illegible]
10.0	11.0	100%	3-3	V. Fine sand, grey stained and oily saturated. Odor [illegible]
11.0	12.0	10%	4-7	Grey stained silt. Strong odor as above.
12.0	13.0	[illegible]	[illegible]	Black v. fine sand; Oily tarry; saturated [illegible]
13.0	14.5	50%	3-2-3	Lt. grey v. fine sand, stained, contains laminations
				and x-beds; wet; odor as above

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SAMPLE/CORE LOG

Boring/Well L-33 Project/No. N 6050- Page 1 of 1

Site Location S-e L Drilling Started 10-14-91 14 20 Drilling Completed 10-14-91 15:00

Total Depth Drilled 15 feet Hole Diameter 6 inches Type of Sample/Coring Device

Length and Diameter of Coring Device Sampling Interval feet

Land-Surface Elev. feet ☐ Surveyed ☐ Estimated Datum

Drilling Fluid Used Drilling Method 4'4 ID Augers

Drilling Contractor Laire Western Driller F. Johnson Helper

Prepared By Chris Jump Hammer Weight Hammer Drop inches

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0				Dark Grey Cinder Fill; Dry
1.5				Brown Sandy Fill w/ gravel's; Dry
3.5	5.0			Lt. Brown to tan silt and sandy silt w/ occasional
				dark mottles; moist
5.0	7.0			Same as 3.5-5.0' with increasing Lt. grey color.
7.0	11.0			Grey Silty v. fine sand, slightly micaceous, some
				dark staining, slight unidentified odor; moist
11.0	15.0			Dark Grey v. fine sand, oily, moisture increases
				downward, Becomes saturated at ± 14' BLS,
				unidentified odor.

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SAMPLE/CORE LOG

Boring/Well L-B4 Project/No. NY60504 Page 1 of 1

Site Location Site L Drilling Started 10-14-91 15:15 Drilling Completed 10-14-91 15:30

Total Depth Drilled 6.5 feet Hole Diameter 3 inches Type of Sample/Coring Device Split spoon

Length and Diameter of Coring Device 2' Sampling Interval 5-6.5 feet

Land-Surface Elev _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used _____ Drilling Method 4 1/4 ID Augers

Drilling Contractor Layne Western Driller F. Johnson Helper _____

Prepared By Chris Jump Hammer Weight 140 lbs Hammer Drop 30 inches

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0	1.0			Dark Grey Cinder Fill, Dry
1.0	3.5			Same as above w/ brick and gravel clasts
3.5	4.0			Tan and Grey Laminated silt; stained; wet
4.0	5.0			Grey "Gooey" silt, stained, unidentified odor; wet
5.0	5.5	100%	=	Dark brown silt, stained, moist
5.5	6.5	100%	3-7	Brown silt, little to no staining

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SAMPLE/CORE LOG

Boring/Well L-B5 Project/No. NY[illegible] Page 1 of ____

Site Location S[illegible] Drilling Started [illegible] Drilling Completed [illegible]

Total Depth Drilled 5 feet Hole Diameter 6 inches Type of Sample/ Coring Device ____

Length and Diameter of Coring Device ____ Sampling Interval ____ feet

Land-Surface Elev. ____ feet ☐ Surveyed ☐ Estimated Datum ____

Drilling Fluid Used ____ Drilling Method [illegible]

Drilling Contractor Laura Neiman Driller Frank Jones Helper ____

Prepared By [illegible] Hammer Weight ____ Hammer Drop ____ inches

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0	2'			Dark Brown to Black Cinder Fill
2'	3'			Brown Silty Cinder Fill
3'	5'			Same as 2'-3' with addition of bricks, gravel & wood

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SAMPLE/CORE LOG

Boring/Well L-B6A Project No. N16050-1 Page 1 of 1

Site Location Site L Drilling Started 10-14-91 1600 Drilling Completed 10-14-91 620

Total Depth Drilled 6.5 feet Hole Diameter 6 inches Type of Sample/Coring Device Split spoon

Length and Diameter of Coring Device 2' Sampling Interval 5-6.5 feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used _____ Drilling Method 4 1/4 ID Augers

Drilling Contractor Layne Western Driller Frank Jarvis Helper _____

Prepared By Nancy Jump Hammer Weight 140 lb Hammer Drop 30 inches

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0	1.5			Dark Grey to Black Cinder Fill; Dry
1.5	3.5			Dark Brown Cinder Fill with bricks & gravel; Dry
3.5	5.0			Tan silty Clay to Clayey Silt; Moist
5.0	5.5	100%	4	Coarse of Dk Grey fill from above
5.5	6.5	100%	6-7	Tan silty v. fine sand w/ sand content increasing
				from top to bottom; moist

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Southport 89-1257

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SAMPLE/CORE LOG

Boring/Well B6B Project/No. N150E07 Page 1 of 1

Site Location Site L Drilling Started 10-14-91 1620 Drilling Completed 10-14-91 1640

Total Depth Drilled 4.5 feet Hole Diameter 6 inches Type of Sample/Coring Device

Length and Diameter of Coring Device Sampling Interval feet

Land-Surface Elev. feet ☐ Surveyed ☐ Estimated Datum

Drilling Fluid Used Drilling Method 4 1/4 ID Auger

Drilling Contractor Layne Western Driller Fred Jones Helper

Prepared By Chris Jump Hammer Weight Hammer Drop inches

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0	3.5			Dark Grey Cinder fill; Dry
3.5	4.5			Black 'gooey' Cinder fill w/ undiscriminated odor.

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SAMPLE/CORE LOG

Boring/Well 337 Project/No. N 60507 Page 1 of

Site Location Site L Drilling Started [illegible] Drilling Completed [illegible]

Total Depth Drilled 5 feet Hole Diameter 6 inches Type of Sample/ Coring Device

Length and Diameter of Coring Device Sampling Interval feet

Land-Surface Elev. feet ☐ Surveyed ☐ Estimated Datum

Drilling Fluid Used Drilling Method [illegible]

Drilling Contractor Layne Western Driller Frank Jackson Helper

Prepared By [illegible] Hammer Weight Hammer Drop inches

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0	4.5			Dark Grey to Black Cinder fill; Dry
4.5	6.0			Black Cinder fill with sand; moist, unidentified odor.
6.0	7.5			Brown silt with black mottling; moist; unid. odor
7.5	10.0			Black micaceous silt with clay moist; odor
				increasing downward; "gooey".
10.0	13.0			Same as 7.5'-10.0' interval with 10% v. fine sand.
13.0	15.0			Dark Grey v. fine sand to silt with a sheen or
				stain throughout; unidentified odor.

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SAMPLE/CORE LOG

Boring/Well L-158 Project/No. NY 3507 Page 1 of 1

Site Location Site L Drilling Started 10-15-91 7.30 Drilling Completed 10-5-9 10:30

Total Depth Drilled 10 feet Hole Diameter 6 inches Type of Sample/Coring Device

Length and Diameter of Coring Device Sampling Interval feet

Land-Surface Elev feet ☐ Surveyed ☐ Estimated Datum

Drilling Fluid Used Drilling Method 4¼ I.D. Augers

Drilling Contractor Layne Western Driller Frank Johnson Helper

Prepared By Chris Jump Hammer Weight Hammer Drop inches

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0	1.0			Dark grey Cinder Fill; Dry
1.0	2.0			Brown to Grey Clay Fill with Gravel; Dry
2.0	3.0			Dark grey cinder fill with clay, gravel and concrete; Dry
3.0	4.5			Brown Clay Fill with gravel, cinders and wood; Dry
4.5	5.5			Same as 3.0-4.5' interval with silt and a black
				wet sheen; moist; slight unidentified odor
5.5	6.5			Black silt, gravel and organic matter; highly stained;
				moist; strong petrol-like odor.
6.5	8.5			V. organic rich black silty 'goo' with wood chips;
				highly stained; wet at 6.5' and moist 7.0-8.5'.
				organic content decreases downward; strong
				petrol-like odor
8.5	10.0			Black silt; highly stained; moist; decreasing odor.

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SAMPLE/CORE LOG

Boring/Well L-3A Project/No. NY6050- Page 1 of 1

Site Location Site L Drilling Started [illegible] Drilling Completed [illegible]

Total Depth Drilled 0 feet Hole Diameter [illegible] inches Type of Sample/ Coring Device

Length and Diameter of Coring Device Sampling Interval feet

Land-Surface Elev feet ☐ Surveyed ☐ Estimated Datum

Drilling Fluid Used Drilling Method [illegible]

Drilling Contractor Layne Western Driller Frank Johnson Helper

Prepared By Chris Jump Hammer Weight Hammer Drop inches

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0	3.0			Black Cinder and Brown Clay fill with gravel and
				concrete; Dry
3.0	4.5			Same as 0-3.0' interval except moist and see
				larger gravel at 4.0-4.5'.
4.5	6.5			Brown silty clay fill with cinders, sand and gravel.
				moist
6.5	8.5			Black silt with sand. Sand appears to be fill.
				Tarry; stained; moist; strong unidentified odor.
8.5	10.0			Black si[illegible] with stain and sheen; [illegible]
				[illegible] wet [illegible]

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SAMPLE/CORE LOG

Boring/Well L3 0 Project/No. N: 0250- Page 1 of

Site Location Site L Drilling Started 0-5-91 10:45 Drilling Completed 0-5-91 [illegible]

Total Depth Drilled 10 feet Hole Diameter 6 inches Type of Sample/Coring Device

Length and Diameter of Coring Device Sampling Interval feet

Land-Surface Elev. feet ☐ Surveyed ☐ Estimated Datum

Drilling Fluid Used Drilling Method [illegible]

Drilling Contractor Wayne Wisdom Driller Frank Johnson Helper

Prepared By Chris Jump Hammer Weight Hammer Drop inches

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0	1.0			Black Cinder Fill; Dry
1.0	4.5			Black Cinder Fill; wet
4.5	6.5			Brown silt with minor staining
6.5	8.5			Brown silt and v. fine sand; Moist. No staining
8.5	10.0			Brown v. fine sand; wet, saturated at base [illegible]

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SAMPLE/CORE LOG

Boring/Well 3 Project/No. [illegible] Page ____ of ____

Site Location S. [illegible] L Drilling Started [illegible] Drilling Completed [illegible]

Total Depth Drilled 10 feet Hole Diameter [illegible] inches Type of Sample/Coring Device ____

Length and Diameter of Coring Device ____ Sampling Interval ____ feet

Land-Surface Elev ____ feet ☐ Surveyed ☐ Estimated Datum ____

Drilling Fluid Used ____ Drilling Method [illegible] Auger

Drilling Contractor [illegible] Driller [illegible] Helper ____

Prepared By [illegible] Hammer Weight ____ Hammer Drop ____ inches

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0	3.0			Brown [illegible] sandy loam; Dry, becoming moist at 1.5'
3.0	5.0			Gradational change from above to Brown / fine sand loam
				moist
5.0	7.5			Brown / fine sand loam w/ Fe staining; moist with
				water content increasing downward
7.5	9.0			Same as 5.0-7.5 interval but wet.
9.0	10.0			Brown sandy loam (but higher clay content than above)
				with Dark brown staining; moist
10.0				Black silt with very fine sand & roots; wet. (This
				was in the base of the augers when pulled).

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SAMPLE/CORE LOG

Boring/Well GB12 Project/No. NY60504 Page 1 of 1

Site Location Site L Drilling Started 10-15-91 12:45 Drilling Completed 10-15-91 [illegible]

Total Depth Drilled 10 feet Hole Diameter 6 inches Type of Sample/Coring Device Split Spoon

Length and Diameter of Coring Device 2' Sampling Interval _____ feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used _____ Drilling Method 4¼ ID Auger

Drilling Contractor Layne Northern Driller Frank Jackson Helper _____

Prepared By Chris Jump Hammer Weight 140 lb. Hammer Drop 30 inches

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0	1.0			Black Cinder Fill ; Dry
1.0	3.5			Brown silt with cinder, brick and gravel Fill ; Dry
3.5	5.5			Brown silty clay ; Moist
5.5	8.0			Black micaceous silt ; wet
8.0	9.5	100%	5-5-5	Black very fine sand ; wet
9.5	10.0	100%	5	Dark grey very fine sand and silt ; Saturated
				(Sample GML4 Taken from 8.0 - 10.0 interval)

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SAMPLE/CORE LOG

Boring/Well L-3 3 Project/No. N160504 Page 1 of

Site Location S - Drilling Started [illegible] Drilling Completed [illegible]

Total Depth Drilled 10 feet Hole Diameter 6 inches Type of Sample/Coring Device split spoon

Length and Diameter of Coring Device 2' Sampling Interval 2-10 feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used _____ Drilling Method [illegible]

Drilling Contractor Layne Northern Driller Frank Johnson Helper _____

Prepared By Chris Jump Hammer Weight 140 lb Hammer Drop 30 inches

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0	2.0			Black silty cinder fill; Dry
2.0	4.0			Dark Brown to Black silt fill with bricks; Dry
4.0	5.5			Brown Silt (one brick cast but it is probably displaced from
				above); Dry
5.5	7.5			Brown Silty Clay to Clayey silt; Moist; napthalene like odor
7.5	8.0			Black micaceous silty clay; Moist; napthalene like odor
8.0	8.5		2	Same as 7.5-8.0' [illegible] fibrous material
8.5	9.0		3	Tan clay, clayey over tan v. fine sand; wet
9.0	10.0		5-5	Tan silty v. fine sand with brown pockets of silty
				liquid; wet, napthalene-like odor,
				[GML2 Sample taken from 8.0-9.0 [illegible]

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SAMPLE/CORE LOG

Boring/Well L-3-7 Project/No. N-0507 Page 1 of

Site Location Site L Drilling Started [illegible] Drilling Completed [illegible]

Total Depth Drilled 11 feet Hole Diameter 6 inches Type of Sample/Coring Device [illegible]

Length and Diameter of Coring Device 2 Sampling Interval 9' - [illegible] feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used _____ Drilling Method [illegible]

Drilling Contractor [illegible] Driller [illegible] Helper _____

Prepared By [illegible] Hammer Weight [illegible] Hammer Drop [illegible] inches

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0	1.0			Black Cinder fill; Dry
1.0	2.0			Brown gray fill; Dry
2.0	5.5			Brown [illegible] Dry [illegible]
5.5	8.0			Brown and Black silt; moist; odor [illegible]
8.0	9.0			Black to Dark Gray silt; moist; odor decreasing
				with depth
9.0	11.0	[illegible]	9-7-5-6	X-laminated Brown and Black [illegible] silt;
				moist 9.0'-10.0' and wet 10.0'-11.0'; moderate
				odor as above.
				[Sample GML3 taken from 9.0'-11.0' interval]

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SAMPLE/CORE LOG

Boring/Well LB.5 Project/No. V960504 Page 1 of

Site Location Site L Drilling Started 10-16-91 9:00 Drilling Completed [illegible]

Total Depth Drilled 8 feet Hole Diameter 6 inches Type of Sample/Coring Device split spoon

Length and Diameter of Coring Device [illegible] Sampling Interval 3-8 feet

Land-Surface Elev _____ feet ☐ Surveyed ☐ Estimated Datum

Drilling Fluid Used Drilling Method [illegible]

Drilling Contractor [illegible] Driller [illegible] Helper

Prepared By [illegible] Hammer Weight 140 lb Hammer Drop 30 inches

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0	3.0			Black [illegible] wood, rubber, [illegible] grave; Dry
3.0	5.0	50%	10-11-9-12	Black silty fill with trash; Dry
5.0	6.5	30%	11-12-45	same as 3.0 - 5.0 interval.
6.5	8.0	30%	8-11-15	Same as 3.0 - 5.0 interval except Wet
				[3.0 to 8.0 interval is part of GMW 3-8 temporary
				sample, HNA reading of 50ppm]

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SAMPLE/CORE LOG

Boring/Well L-B16 Project/No. NY[illegible]-7-4 Page 1 of [illegible]

Site Location Site L Drilling Started [illegible] Drilling Completed [illegible]

Total Depth Drilled 8 feet Hole Diameter 6 inches Type of Sample/ Coring Device split spoon

Length and Diameter of Coring Device 2' Sampling Interval [illegible] feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used _____ Drilling Method 4 + 1/2 Auger

Drilling Contractor Layne Northern Driller [illegible] Helper _____

Prepared By Chris Jump Hammer Weight [illegible] Hammer Drop [illegible] inches

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0	3.0			Brown [illegible] fill with [illegible]
3.0	4.5		6-8-21	Same as above (0-3.0')
4.5	6.0			No sample due to trash
6.0	7.0		5-5	Silty black fill
7.0	8.0		11-9	Brown silt with minor black staining.
				(3.0 - 8.0 interval is part of GM-L 3-8' composite)
				HNU reading of 50ppm

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SAMPLE/CORE LOG

Boring/Well LB17 Project/No. NY60504 Page 1 of [illegible]

Site Location Site L Drilling Started [illegible] Drilling Completed [illegible]

Total Depth Drilled 14 feet Hole Diameter 6 inches Type of Sample/Coring Device [illegible]

Length and Diameter of Coring Device 2' Sampling Interval [illegible] feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used _____ Drilling Method [illegible]

Drilling Contractor [illegible] Driller [illegible] Helper _____

Prepared By [illegible] Hammer Weight [illegible] Hammer Drop 30 inches

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0	3.0			Black Cinder fill with Trash/wood [illegible]; Dry
3.0	5.0		5-7-7-5	Same as above except moist
5.0	7.0		4-4-5-6	Same as 3.0 to 5.0
7.0	7.5			Black silty fill; moist
7.5	8.0			Brown silty v. fine sand; stained moist
8.0	9.5			Black silty v. fine sand; stain decreases downward;
				strong [illegible] fried odor; moist (wet [illegible])
9.5	10.0			Grey silty v. fine sand w/ black stain; moist
10.0	10.5			Black silty very fine sand; moist
10.5	14.0			Grey silty v. fine sand; highly stained; moderate
				volatilized odor; moist.
				3.0 to 8.0 interval part of GMLI 3-8 composite sample
				HNU reading - 50 ppm
				8.0 to 14.0 interval part of GMLI 8-14' sample
				HNU reading - 70 ppm

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SAMPLE/CORE LOG

Boring/Well M1 Project/No. NY 60505 Page ____ of ____

Site Location DEAD CREEK Drilling Started 11/5/91 Drilling Completed 11/5/91

Total Depth Drilled ____ feet Hole Diameter ____ inches Type of Sample/Coring Device 3" Dia Split-Spoon

Length and Diameter of Coring Device ____ Sampling Interval ____ feet

Land-Surface Elev. ____ feet ☐ Surveyed ☐ Estimated Datum ____

Drilling Fluid Used ____ Drilling Method ____

Drilling Contractor LAYNE WESTERN Driller FRANK JOHNSON Helper ____

Prepared By TJL Hammer Weight 140 Hammer Drop ____ inches

8.9' water depth
~1.5' sediment forced upward into PVC pipe

Sample/Core Depth (feet below land surface) From	To	% Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0	1.5	35	—	Black spongy sediment, oil sheen on water, 3" BLK slurry-sed; Sheen at bottom material; 3" BLK-GRN. spongy sediment; 3" BLK sand; Headspace 7 ppm
1.5	3.0	75	54/20/20	2' BLK sandy slurry-sediment + BLK sand; 3" gray-green sand, slight odor
3.0	4.5	50	15/12/15	BLK sand, slight odor → HEAVING ←
				PVC pipe and formation collapse
		Total	Depth	13.4' below water surface (prior to collapse
				BACKGROUND PID = 1.0-2.0 ppm

GEOLOGIST: [illegible]

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SAMPLE/CORE LOG

Boring/Well M2 Project/No. NY 60505 Page ____ of ____

Site Location DEAD CREEK Drilling Started 11/5/91 Drilling Completed 11/5/91

Total Depth Drilled ____ feet Hole Diameter ____ inches Type of Sample/ Coring Device Split Spoon

Length and Diameter of Coring Device 18" x 3" / 24" x 2 1/2" Sampling Interval ____ feet

Land-Surface Elev. ____ feet ☐ Surveyed ☐ Estimated Datum ____

Drilling Fluid Used ____ Drilling Method ____

Drilling Contractor LAYNE WESTERN Driller FRANK JOHNSON Helper ____

Prepared By TJL Hammer Weight 140 Hammer Drop ____ inches

10.4' Water Depth

Sample/Core Depth (feet below land surface) From	To	% Core Recovery ~~(feet)~~	Time/Hydraulic Pressure or Blows per 6 inches			Sample/Core Description
0	1.5	100	23	19	19	12' Rubbery - Spongy BLK - GRY SEDIMENT
						6" BLK - TO GRY - BLK FINE SAND
						HEAD SPACE 5 ppm
1.5	3.5	25	>50			6" Black FINE SAND
			—			HEAVING —

G&M Form 22 6 86

GERAGHTY & MILLER, INC.
Environmental Services

B50

SAMPLE/CORE LOG

Boring/Well M3 Project/No. NY6050.5 Page ____ of ____

Site Location DEAD CREEK Drilling Started 11/5/91 Drilling Completed 11/5/91

Total Depth Drilled ____ feet Hole Diameter ____ inches Type of Sample/Coring Device Split-Spoon

Length and Diameter of Coring Device 18" x 3" Sampling Interval ____ feet

Land-Surface Elev. ____ feet ☐ Surveyed ☐ Estimated Datum ____

Drilling Fluid Used ____ Drilling Method ____

Drilling Contractor LAYNE WESTERN Driller FRANK JOHNSON Helper ____

Prepared By ____ Hammer Weight 140 Hammer Drop ____ inches

4' WATER
15' PVC CASING FORCED 7-8' INTO SEDIMENT & BA...

Sample/Core Depth (feet below land surface) From	To	% Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0	1.5	100	0 | 1 | 5	ORGANIC LAYER (LEAVES ROOTS GRASS) 6" BLK LOOSE
				SPONGY SEDIMENT; 12 BLK GRAY SEDIMENT SILT/CLAY
				HEADSPACE 9 ppm
1.5	3.0	40	—	SEDIMENT/WATER dropped out of spoon; 6"
				BLK SPONGY material, slight odor - ...
3.0	4.5	100		BLK FINE SAND, SLIGHT ODOR
4.5	6.5	100		BLK SPONGY SEDIMENT 4.75'-6.5'; FINE
				BLK SAND 4.5'-4.75'
6.5	8.0	100		12" BLK SPONGY SEDIMENT; 6" FINE BLK SAND
8.0	9.5	100		BLK FINE SAND; INAERGIC ODOR
9.5	11.5	100		BLK-GRY FINE SAND; MORE GRY than above,
11.5	13	100		BLK-GRY FINE SAND → HEAVING
				HEAVING ? PVC PIPE SHIFTING
			TOTAL	Depth 12.5' FROM TOP OF SURFACE

APPENDIX C

DIGITIZED SITE BASE MAP

APPENDIX D

LABORATORY REPORTS

SL SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

5102 LaRoche Avenue • Savannah, GA 31404 • (912) 354-7858 • Fax (912) 352-0165

D1

LOG NO: S1-36674

Received: 19 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS01/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED	SDG#
36674-1	PA-B1 0-2'	10-18-91	GMS01
36674-2	PB-B1 0-2'	10-18-91	GMS01

PARAMETER	36674-1	36674-2
Volatiles by GC/MS (8240)		
Chloromethane, ug/kg dw	56U	1800U
Bromomethane, ug/kg dw	56U	1800U
Vinyl Chloride, ug/kg dw	56U	1800U
Chloroethane, ug/kg dw	56U	1800U
Methylene Chloride, ug/kg dw	28U	1300B
Acetone, ug/kg dw	56U	1800U
Carbon Disulfide, ug/kg dw	63	920U
1,1-Dichloroethene, ug/kg dw	28U	920U
1,1-Dichloroethane, ug/kg dw	28U	920U
cis/trans-1,2-Dichloroethylene, ug/kg dw	28U	920U
Chloroform, ug/kg dw	28U	920U
1,2-Dichloroethane, ug/kg dw	28U	920U
2-Butanone, ug/kg dw	31BJ	3700B
1,1,1-Trichloroethane, ug/kg dw	28U	920U
Carbon Tetrachloride, ug/kg dw	28U	920U
Vinyl Acetate, ug/kg dw	56U	1800U
Bromodichloromethane, ug/kg dw	28U	920U
1,1,2,2-Tetrachloroethane, ug/kg dw	28U	920U
1,2-Dichloropropane, ug/kg dw	28U	920U
Trans-1,3-Dichloropropene, ug/kg dw	28U	920U
Trichloroethene, ug/kg dw	28U	920U
Dibromochloromethane, ug/kg dw	28U	920U

D2

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REPORT OF RESULTS

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36674-1	PA-B1 0-2'	10-18-91	GMS01
36674-2	PB-B1 0-2'	10-18-91	GMS01

PARAMETER	36674-1	36674-2
1,1,2-Trichloroethane, ug/kg dw	28U	920U
Benzene, ug/kg dw	28U	920U
Cis-1,3-Dichloropropene, ug/kg dw	28U	920U
Bromoform, ug/kg dw	28U	920U
2-Hexanone, ug/kg dw	56U	1800U
4-Methyl-2-pentanone, ug/kg dw	56U	1800U
Tetrachloroethene, ug/kg dw	28U	920U
Toluene, ug/kg dw	28U	5300
Chlorobenzene, ug/kg dw	1600E	2000
Ethylbenzene, ug/kg dw	28U	920U
Styrene, ug/kg dw	28U	920U
Xylenes, ug/kg dw	28U	360J
Date Analyzed	10.29.91	10.31.91

SL SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

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D3

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Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED	SDG#
36674-1	PA-B1 0-2'	10-18-91	GMS01
36674-2	PB-B1 0-2'	10-18-91	GMS01

PARAMETER	36674-1	36674-2
Semivolatiles (8270)		
Phenol, ug/kg dw	6200U	490U
bis(2-Chloroethyl) ether, ug/kg dw	6200U	490U
2-Chlorophenol, ug/kg dw	6200U	460J/*
1,3-Dichlorobenzene, ug/kg dw	650J/*	180J
1,4-Dichlorobenzene, ug/kg dw	1900J/*	2300/*
Benzyl alcohol, ug/kg dw	6200U	490U
1,2-Dichlorobenzene, ug/kg dw	850J/*	490U
2-Methylphenol (o-cresol), ug/kg dw	6200U	490U
Bis(2-chloroisopropyl)ether, ug/kg dw	6200U	490U
4-Methylphenol (p-cresol), ug/kg dw	6200U	490U
N-Nitroso-di-n-propylamine, ug/kg dw	6200U	490U
Hexachloroethane, ug/kg dw	6200U	490U
Nitrobenzene, ug/kg dw	6200U	490U
Isophorone, ug/kg dw	6200U	490U
2-Nitrophenol, ug/kg dw	6200U	490U
2,4-Dimethylphenol, ug/kg dw	6200U	490U
Benzoic acid, ug/kg dw	31000U	2500U
bis(2-Chloroethoxy) methane, ug/kg dw	6200U	490U
2,4-Dichlorophenol, ug/kg dw	6200U	840/*
1,2,4-Trichlorobenzene, ug/kg dw	6200U/*	1600/*
Naphthalene, ug/kg dw	5400U/*	1100/*
4-Chloroaniline, ug/kg dw	6200U	490U

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Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED	SDG#
36674-1	PA-B1 0-2'	10-18-91	GMS01
36674-2	PB-B1 0-2'	10-18-91	GMS01

PARAMETER	36674-1	36674-2
Hexachlorobutadiene, ug/kg dw	6200U	490U
4-Chloro-3-methylphenol, ug/kg dw	6200U	490U
2-Methylnaphthalene, ug/kg dw	1800J/*	490U
Hexachlorocyclopentadiene, ug/kg dw	6200U	490U
2,4,6-Trichlorophenol, ug/kg dw	6200U	1300/*
2,4,5-Trichlorophenol, ug/kg dw	31000U	2500U
2-Chloronaphthalene, ug/kg dw	6200U	490U
2-Nitroaniline, ug/kg dw	31000U	2500U
Dimethylphthalate, ug/kg dw	6200U	490U
Acenaphthylene, ug/kg dw	720J/*	490U
3-Nitroaniline, ug/kg dw	31000U	2500U
Acenaphthene, ug/kg dw	530J/*	230J/*
2,4-Dinitrophenol, ug/kg dw	31000U	2500U
4-Nitrophenol, ug/kg dw	31000U	2500U
Dibenzofuran, ug/kg dw	1200J/*	160J/*
2,4-Dinitrotoluene, ug/kg dw	6200U	490U
2,6-Dinitrotoluene, ug/kg dw	6200U	490U
Diethylphthalate, ug/kg dw	6200U	490U
4-Chlorophenyl-phenyl ether, ug/kg dw	6200U	490U
Fluorene, ug/kg dw	1500J/*	340J/*
4-Nitroaniline, ug/kg dw	31000U	2500U
4,6-Dinitro-2-methylphenol, ug/kg dw	31000U	2500U
N-Nitrosodiphenylamine/Diphenylamine, ug/kg dw	6200U	520/*

SL SAVANNAH LABORATORIES
& ENVIRONMENTAL SERVICES, INC.

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D5

LOG NO: S1-36697

Received: 22 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS02/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED	SDG#
36697-1	PC-B1 (0-1.5')	10-21-91	GMS02
36697-2	PD-B1 (0-1.5')	10-21-91	
36697-3	PE-B1 (0-2.0')	10-21-91	

PARAMETER	36697-1	36697-2	36697-3
4,6-Dinitro-2-methylphenol, ug/kg dw	62000U	3300U	4300U
N-Nitrosodiphenylamine/Diphenylamine, ug/kg dw	12000U	650U	850U
4-Bromophenyl-phenyl-ether, ug/kg dw	12000U	650U	850U
Hexachlorobenzene, ug/kg dw	12000U	650U	110J
Pentachlorophenol, ug/kg dw	62000U	1500J	1600J
Phenanthrene, ug/kg dw	1600J	900	410J
Anthracene, ug/kg dw	12000U	370J	130J
Di-n-butylphthalate, ug/kg dw	12000U	650U	850U
Fluoranthene, ug/kg dw	3200J	840	880
Pyrene, ug/kg dw	5600J	3400	2500
Butylbenzylphthalate, ug/kg dw	12000U	650U	850U
3,3'-Dichlorobenzidine, ug/kg dw	25000U	1300U	1700U
Benzo(a)anthracene, ug/kg dw	1600J	950	480J
bis(2-Ethylhexyl) phthalate, ug/kg dw	7100J	1300	1200
Chrysene, ug/kg dw	2500J	1300	840J
Di-n-octylphthalate, ug/kg dw	12000U	650U	850U
Benzo(b)fluoranthene, ug/kg dw	2700J	2100	1100
Benzo(k)fluoranthene, ug/kg dw	3200J	1100	670J
Benzo(a)pyrene, ug/kg dw	2300J	1200	550J
Indeno (1,2,3-cd)pyrene, ug/kg dw	12000U	730	270J
Dibenzo(a,h)anthracene, ug/kg dw	12000U	650U	850U
Benzo(g,h,i)perylene, ug/kg dw	1500J	1100	380J
Date Extracted	10.31.91	10.31.91	10.31.91
Date Analyzed	11.19.91	11.11.91	11.12.22

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36697-2	PD-B1 (0-1.5')	10-21-91	
36697-3	PE-B1 (0-2.0')	10-21-91	

PARAMETER	36697-1	36697-2	36697-3
4-Chloroaniline, ug/kg dw	12000U	650U	850U
Hexachlorobutadiene, ug/kg dw	12000U	650U	850U
4-Chloro-3-methylphenol, ug/kg dw	12000U	650U	850U
2-Methylnaphthalene, ug/kg dw	12000U	240J	100J
Hexachlorocyclopentadiene, ug/kg dw	12000U	650U	850U
2,4,6-Trichlorophenol, ug/kg dw	12000U	650U	350J
2,4,5-Trichlorophenol, ug/kg dw	62000U	3300U	96J
2-Chloronaphthalene, ug/kg dw	12000U	650U	850U
2-Nitroaniline, ug/kg dw	62000U	3300U	4300U
Dimethylphthalate, ug/kg dw	12000U	650U	850U
Acenaphthylene, ug/kg dw	12000U	650U	850U
3-Nitroaniline, ug/kg dw	62000U	3300U	4300U
Acenaphthene, ug/kg dw	12000U	430J	850U
2,4-Dinitrophenol, ug/kg dw	62000U	3300U	4300U
4-Nitrophenol, ug/kg dw	62000U	3300U	4300U
Dibenzofuran, ug/kg dw	12000U	350J	850U
2,4-Dinitrotoluene, ug/kg dw	12000U	650U	850U
2,6-Dinitrotoluene, ug/kg dw	12000U	650U	850U
Diethylphthalate, ug/kg dw	12000U	650U	850U
4-Chlorophenyl-phenyl ether, ug/kg dw	12000U	650U	850U
Fluorene, ug/kg dw	12000U	950	170J
4-Nitroaniline, ug/kg dw	62000U	3300U	4300U

SL SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

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D7

LOG NO: S1-36697

Received: 22 OCT 91

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Geraghty & Miller, Inc.
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Plainview, NY 11803

Project: SDG#GMS02/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED	SDG#
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36697-2	PD-B1 (0-1.5')	10-21-91	
36697-3	PE-B1 (0-2.0')	10-21-91	

PARAMETER	36697-1	36697-2	36697-3
Aroclor-1221, ug/kg dw	60000U	31000U	41000U
Aroclor-1232, ug/kg dw	60000U	31000U	41000U
Aroclor-1242, ug/kg dw	60000U	31000U	41000U
Aroclor-1248, ug/kg dw	440000	85000	68000
Aroclor-1254, ug/kg dw	120000U	53000J	46000J
Aroclor-1260, ug/kg dw	120000U	63000U	82000U
Date Extracted	11.06.91	11.06.91	11.06.91
Date Analyzed	12.09.91	12.09.91	12.09.91

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SL SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

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36697-2	PD-B1 (0-1.5')	10-21-91	
36697-3	PE-B1 (0-2.0')	10-21-91	

PARAMETER	36697-1	36697-2	36697-3
Pesticides (8080)			
alpha-BHC, ug/kg dw	6000U	3100U	4100U
beta-BHC, ug/kg dw	6000U	3100U	4100U
delta-BHC, ug/kg dw	6000U	3100U	4100U
gamma-BHC, ug/kg dw	6000U	3100U	4100U
Heptachlor, ug/kg dw	6000U	3100U	4100U
Aldrin, ug/kg dw	6000U	3100U	4100U
Heptachlor epoxide, ug/kg dw	6000U	3100U	4100U
Endosulfan I, ug/kg dw	6000U	3100U	4100U
Dieldrin, ug/kg dw	12000U	6300U	8200U
4,4'-DDE, ug/kg dw	12000U	6300U	8200U
Endrin, ug/kg dw	12000U	6300U	8200U
Endosulfan II, ug/kg dw	12000U	6300U	8200U
4,4'-DDD, ug/kg dw	12000U	6300U	8200U
Endosulfan sulfate, ug/kg dw	12000U	6300U	8200U
4,4'-DDT, ug/kg dw	12000U	6300U	8200U
Endrin ketone, ug/kg dw	12000U	6300U	8200U
Methoxychlor, ug/kg dw	60000U	31000U	41000U
alpha-Chlordane, ug/kg dw	60000U	31000U	41000U
gamma-Chlordane, ug/kg dw	60000U	31000U	41000U
Toxaphene, ug/kg dw	120000U	63000U	82000U
Aroclor-1016, ug/kg dw	60000U	31000U	41000U

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D9

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36697-3	PE-B1 (0-2.0')	10-21-91	

PARAMETER	36697-1	36697-2	36697-3
Metals (6010)			
Aluminum, mg/kg dw	11800*	6590*	12300*
Antimony, mg/kg dw	20.5BN*	41.9N*	33.3N*
Barium, mg/kg dw	4480	8640	8020
Beryllium, mg/kg dw	1.8U	1.8U	2.4U
Cadmium, mg/kg dw	37.5N*	69.6N*	38.8N*
Calcium, mg/kg dw	12500	20400	16100
Chromium, mg/kg dw	187N	104N	296N
Cobalt, mg/kg dw	12.3B	12.4B	10.7B
Copper, mg/kg dw	10300N	25100N	19400N
Iron, mg/kg dw	27300*	48700*	46600*
Magnesium, mg/kg dw	3660	3380	3440
Manganese, mg/kg dw	106N	153N	96.4N
Nickel, mg/kg dw	417*	1260*	686*
Potassium, mg/kg dw	2030	1010B	1260B
Silver, mg/kg dw	12.1N	21.0N	19.0N
Sodium , mg/kg dw	300B	362B	446B
Vanadium, mg/kg dw	39.4	30.8	54.8
Zinc, mg/kg dw	11700	26100	18500
Date Analyzed	11.07.91	11.07.91	11.07.91
Mercury (7471)			
Mercury , mg/kg dw	3.6	5.0	3.3
Date Analyzed	11.18.91	11.18.91	11.18.91

D10 SL SAVANNAH LABORATORIES
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36697-2	PD-B1 (0-1.5')	10-21-91	
36697-3	PE-B1 (0-2.0')	10-21-91	

PARAMETER	36697-1	36697-2	36697-3
Lead (7421)			
Lead, mg/kg dw	1550*	2660*	1810*
Date Analyzed	12.02.91	12.02.91	12.02.91
Selenium (7740)			
Selenium, mg/kg dw	5.8+N*	9.45N*	6.2+N*
Date Analyzed	11.29.91	11.29.91	11.29.91
Arsenic (7060)			
Arsenic, mg/kg dw	198SN	63.1SN	107+N
Date Analyzed	12.02.91	12.04.91	12.04.91
Thallium (7841)			
Thallium, mg/kg dw	3.7UW	3.9UWN	4.7UWN
Date Analyzed	11.27.91	11.27.91	11.27.91
Cyanide (9010A)			
Cyanide, Total, mg/kg dw	0.48U	0.49U	0.78
Date Analyzed	10.28.91	10.28.91	10.28.91
Percent Solids, %	53	51	39

SL SAVANNAH LABORATORIES
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D11

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36697-3	PE-B1 (0-2.0')	10-21-91	

PARAMETER	36697-1	36697-2	36697-3
Dibromochloromethane, ug/kg dw	47U	49U	64U
1,1,2-Trichloroethane, ug/kg dw	47U	49U	64U
Benzene, ug/kg dw	47U	49U	64U
Cis-1,3-Dichloropropene, ug/kg dw	47U	49U	64U
Bromoform, ug/kg dw	47U	49U	64U
2-Hexanone, ug/kg dw	94U	98U	130U
4-Methyl-2-pentanone, ug/kg dw	94U	98U	130U
Tetrachloroethene, ug/kg dw	47U	49U	64U
Toluene, ug/kg dw	47U	49U	35J
Chlorobenzene, ug/kg dw	990	1800	440
Ethylbenzene, ug/kg dw	47U	49U	64U
Styrene, ug/kg dw	47U	49U	64U
Xylenes, ug/kg dw	47U	40J	64U
Date Analyzed	11.06.91	11.06.91	11.06.91

D12

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Received: 22 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS02/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED	SDG#
36697-1	PC-B1 (0-1.5')	10-21-91	GMS02
36697-2	PD-B1 (0-1.5')	10-21-91	
36697-3	PE-B1 (0-2.0')	10-21-91	

PARAMETER	36697-1	36697-2	36697-3
Semivolatiles (8270)			
Phenol, ug/kg dw	12000U	650U	850U
bis(2-Chloroethyl) ether, ug/kg dw	12000U	650U	850U
2-Chlorophenol, ug/kg dw	12000U	150J	120J
1,3-Dichlorobenzene, ug/kg dw	12000U	350J	760J
1,4-Dichlorobenzene, ug/kg dw	1800J	1700	1600
Benzyl alcohol, ug/kg dw	12000U	650U	850U
1,2-Dichlorobenzene, ug/kg dw	12000U	1200	1700
2-Methylphenol (o-cresol), ug/kg dw	12000U	650U	850U
Bis(2-chloroisopropyl)ether, ug/kg dw	12000U	650U	850U
4-Methylphenol (p-cresol), ug/kg dw	12000U	650U	850U
N-Nitroso-di-n-propylamine, ug/kg dw	12000U	650U	850U
Hexachloroethane, ug/kg dw	12000U	650U	850U
Nitrobenzene, ug/kg dw	12000U	650U	850U
Isophorone, ug/kg dw	12000U	650U	850U
2-Nitrophenol, ug/kg dw	12000U	650U	850U
2,4-Dimethylphenol, ug/kg dw	12000U	650U	850U
Benzoic acid, ug/kg dw	62000U	3300U	4300U
bis(2-Chloroethoxy) methane, ug/kg dw	12000U	650U	850U
2,4-Dichlorophenol, ug/kg dw	12000U	650U	340J
1,2,4-Trichlorobenzene, ug/kg dw	3800J	3400	4400
Naphthalene, ug/kg dw	12000U	350J	300J

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LOG NO: S1-36674

Received: 19 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS01/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED	SDG#
36674-1	PA-B1 0-2'	10-18-91	GMS01
36674-2	PB-B1 0-2'	10-18-91	GMS01

PARAMETER	36674-1	36674-2
4-Bromophenyl-phenyl-ether, ug/kg dw	6200U	490U
Hexachlorobenzene, ug/kg dw	6200U	490U
Pentachlorophenol, ug/kg dw	31000U	1400J/*
Phenanthrene, ug/kg dw	6400	870/*
Anthracene, ug/kg dw	1700J/*	430J/*
Di-n-butylphthalate, ug/kg dw	6200U	490U
Fluoranthene, ug/kg dw	5400J/*	1800/*
Pyrene, ug/kg dw	7500/*	6600/*
Butylbenzylphthalate, ug/kg dw	6200U	490U
3,3'-Dichlorobenzidine, ug/kg dw	12000U	980U
Benzo(a)anthracene, ug/kg dw	3700J/*	1600/*
bis(2-Ethylhexyl) phthalate, ug/kg dw	12000B/*	2400B/*
Chrysene, ug/kg dw	9400/*	1700/*
Di-n-octylphthalate, ug/kg dw	6200U	490U
Benzo(b)fluoranthene, ug/kg dw	30000/*	2700/*
Benzo(k)fluoranthene, ug/kg dw	15000/*	1900/*
Benzo(a)pyrene, ug/kg dw	10000/*	1900
Indeno (1,2,3-cd)pyrene, ug/kg dw	9000/*	700/*
Dibenzo(a,h)anthracene, ug/kg dw	3900J/*	490U
Benzo(g,h,i)perylene, ug/kg dw	12000/*	650/*
Date Extracted	12.23-11.1	10.23.91
Date Analyzed	10.28-11.2	10.25.91

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LOG NO: S1-36674

Received: 19 OCT 91

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125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS01/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED	SDG#
36674-1	PA-B1 0-2'	10-18-91	GMS01
36674-2	PB-B1 0-2'	10-18-91	GMS01

PARAMETER	36674-1	36674-2
Pesticides (8080)		
alpha-BHC, ug/kg dw	15000U	12000U
beta-BHC, ug/kg dw	15000U	12000U
delta-BHC, ug/kg dw	15000U	12000U
gamma-BHC, ug/kg dw	15000U	12000U
Heptachlor, ug/kg dw	15000U	12000U
Aldrin, ug/kg dw	15000U	12000U
Heptachlor epoxide, ug/kg dw	15000U	12000U
Endosulfan I, ug/kg dw	15000U	12000U
Dieldrin, ug/kg dw	29000U	23000U
4,4'-DDE, ug/kg dw	29000U	23000U
Endrin, ug/kg dw	29000U	23000U
Endosulfan II, ug/kg dw	29000U	23000U
4,4'-DDD, ug/kg dw	29000U	23000U
Endosulfan sulfate, ug/kg dw	29000U	23000U
4,4'-DDT, ug/kg dw	29000U	23000U
Endrin ketone, ug/kg dw	29000U	23000U
Methoxychlor, ug/kg dw	150000U	120000U
alpha-Chlordane, ug/kg dw	150000U	120000U
gamma-Chlordane, ug/kg dw	150000U	120000U
Toxaphene, ug/kg dw	290000U	230000U
Aroclor-1016, ug/kg dw	150000U	120000U
Aroclor-1221, ug/kg dw	150000U	120000U

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LOG NO: S1-36674

Received: 19 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS01/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED	SDG#
36674-1	PA-B1 0-2'	10-18-91	GMS01
36674-2	PB-B1 0-2'	10-18-91	GMS01

PARAMETER	36674-1	36674-2
Aroclor-1232, ug/kg dw	150000U	120000U
Aroclor-1242, ug/kg dw	150000U	120000U
Aroclor-1248, ug/kg dw	150000U	250000
Aroclor-1254, ug/kg dw	180000J	230000U
Aroclor-1260, ug/kg dw	130000J	120000U
Date Extracted	10.28.91	10.28.91
Date Analyzed	12.09.91	12.09.91

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Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED	SDG#
36674-1	PA-B1 0-2'	10-18-91	GMS01
36674-2	PB-B1 0-2'	10-18-91	GMS01

PARAMETER	36674-1	36674-2
Metals (6010)		
Aluminum, mg/kg dw	5780	4920
Antimony, mg/kg dw	20.3BN	14.6UN
Barium, mg/kg dw	2970	1980
Beryllium, mg/kg dw	1.9U	1.5U
Cadmium, mg/kg dw	51.7	22.0
Calcium, mg/kg dw	12500	17300
Chromium, mg/kg dw	134	71.1
Cobalt, mg/kg dw	17.2B	10.3B
Copper, mg/kg dw	12100N*	3160N*
Iron, mg/kg dw	39000	24200
Magnesium, mg/kg dw	3130	3030
Manganese, mg/kg dw	108	119
Nickel, mg/kg dw	1170N*	292N*
Potassium, mg/kg dw	830B	1070B
Silver, mg/kg dw	11.7	5.1
Sodium , mg/kg dw	225B	259B
Vanadium, mg/kg dw	23.3	16.4
Zinc, mg/kg dw	13600EN	5140EN
Date Analyzed	11.19.91	11.19.91
Mercury (7471)		
Mercury , mg/kg dw	1.2	1.1
Date Analyzed	11.15.91	11.15.91

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Plainview, NY 11803

Project: SDG#GMS01/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED	SDG#
36674-1	PA-B1 0-2'	10-18-91	GMS01
36674-2	PB-B1 0-2'	10-18-91	GMS01

PARAMETER	36674-1	36674-2
Lead (7421)		
Lead, mg/kg dw	1520*	696*
Date Analyzed	11.04.91	11.06.91
Selenium (7740)		
Selenium, mg/kg dw	6.2*	4.4*
Date Analyzed	11.09.91	11.09.91
Arsenic (7060)		
Arsenic, mg/kg dw	100S	72.2
Date Analyzed	12.02.91	12.02.91
Thallium (7841)		
Thallium, mg/kg dw	3.7UW	2.9UW
Date Analyzed	11.04.91	11.04.91
Cyanide (9010A)		
Cyanide, Total, mg/kg dw	17.4N	2.5N
Date Analyzed	10.25.91	10.25.91
Percent Solids, %	54	68

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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
36674-3	PA-B2 2-4'	10-18-91
36674-4	PA-B3 5-6'	10-18-91
36674-5	PB-B2 4-6'	10-18-91
36674-6	PB-B3 2-4'	10-18-91

PARAMETER	36674-3	36674-4	36674-5	36674-6
Metals (6010)				
Aluminum, mg/kg dw	9310	9290	7170	7460
Antimony, mg/kg dw	14.2UN	13.3UN	13.5UN	12.6UN
Barium, mg/kg dw	240	230	202	274
Beryllium, mg/kg dw	1.4U	1.3U	1.4U	1.3U
Cadmium, mg/kg dw	1.4U	1.3U	1.4U	1.3U
Calcium, mg/kg dw	9650	16000	16100	18500
Chromium, mg/kg dw	12.3	12.0	10.4	10.9
Cobalt, mg/kg dw	7.4B	11.0B	8.7B	10.5B
Copper, mg/kg dw	28.3N*	29.9N*	21.8N*	23.6N*
Iron, mg/kg dw	19500	15800	17600	14400
Magnesium, mg/kg dw	6860	7680	7160	7460
Manganese, mg/kg dw	226	305	177	252
Nickel, mg/kg dw	18.5N*	23.6N*	19.3N*	22.6N*
Potassium, mg/kg dw	2940	1800	1470	1700
Silver, mg/kg dw	2.8U	2.7U	2.7U	2.5U
Sodium , mg/kg dw	251B	269B	281B	304B
Vanadium, mg/kg dw	23.5	24.9	20.2	22.2
Zinc, mg/kg dw	106EN	1010EN	65.0EN	133EN
Date Analyzed	11.19.91	11.19.91	11.19.91	11.19.91
Mercury (7471)				
Mercury , mg/kg dw	0.03	0.03	0.03	0.02
Date Analyzed	11.14.91	11.14.91	11.14.91	11.14.91

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125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS01/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
36674-3	PA-B2 2-4'	10-18-91
36674-4	PA-B3 5-6'	10-18-91
36674-5	PB-B2 4-6'	10-18-91
36674-6	PB-B3 2-4'	10-18-91

PARAMETER	36674-3	36674-4	36674-5	36674-6
Lead (7421)				
Lead, mg/kg dw	14.6*	12.5*	10*	11.7*
Date Analyzed	11.04.91	11.04.91	11.04.91	11.04.91
Selenium (7740)				
Selenium, mg/kg dw	1.4UW	1.3US	1.4U	1.3UW
Date Analyzed	11.17.91	11.17.91	11.17.91	11.17.91
Arsenic (7060)				
Arsenic, mg/kg dw	4.5S	12.2	11.1S	2.5
Date Analyzed	12.09.91	12.02.91	12.04.91	12.09.91
Thallium (7841)				
Thallium, mg/kg dw	2.8UW	2.7UW	2.7UW	2.5UW
Date Analyzed	11.04.91	11.04.91	11.04.91	11.04.91
Cyanide (9010A)				
Cyanide, Total, mg/kg dw	<0.36UN	0.33UN	0.34UN	0.31UN
Date Analyzed	10.25.91	10.25.91	10.25.91	10.25.91

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Plainview, NY 11803

Project: SDG#GMS01/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
36674-3	PA-B2 2-4'	10-18-91
36674-4	PA-B3 5-6'	10-18-91
36674-5	PB-B2 4-6'	10-18-91
36674-6	PB-B3 2-4'	10-18-91

PARAMETER	36674-3	36674-4	36674-5	36674-6
Pesticides (8080)				
Aroclor-1016, ug/kg dw	110U	110U	110U	100U
Aroclor-1221, ug/kg dw	110U	110U	110U	100U
Aroclor-1232, ug/kg dw	110U	110U	110U	100U
Aroclor-1242, ug/kg dw	110U	110U	110U	100U
Aroclor-1248, ug/kg dw	250	110U	110U	140
Aroclor-1254, ug/kg dw	130J	310	220U	200U
Aroclor-1260, ug/kg dw	230U	210U	220U	200U
Date Extracted	10.30.91	10.30.91	10.30.91	10.30.91
Date Analyzed	12.03.91	12.03.91	12.03.91	12.03.91
Percent Solids, %	70	75	74	80

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Plainview, NY 11803

Project: SDG#GMS01/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
36674-7	GML1 Matrix Spike (S1-36621)(% Recovery)
36674-8	GML1 Matrix Spike Duplicate (S1-36621)(% Recovery)

PARAMETER	36674-7	36674-8
Volatiles by GC/MS (8240)		
1,1-Dichloroethene	71 %	59 %
Trichloroethene	118 %	101 %
Benzene	124 %	105 %
Toluene	186 %	67 %
Chlorobenzene	118 %	104 %
Semivolatiles (8270)		
2-Chlorophenol	---	---
1,4-Dichlorobenzene	---	---
N-Nitrosodi-N-Propylamine	---	---
1,2,4-Trichlorobenzene	---	---
4-Chloro-3-methylphenol	---	---
Acenaphthene	---	---
4-Nitrophenol	---	---
2,4-Dinitrotoluene	---	---
Pentachlorophenol	---	---
Pyrene	---	---
Pesticides (8080)		
gamma-BHC	---	---
Heptachlor	---	---
Aldrin	---	---
Dieldrin	---	---
Endrin	---	---
4,4'-DDT	---	---

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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
36674-7	GML1 Matrix Spike (S1-36621) (% Recovery)
36674-8	GML1 Matrix Spike Duplicate (S1-36621) (% Recovery)

PARAMETER	36674-7	36674-8
Metals (6010)		
Aluminum	---	---
Antimony	44 %	45 %
Barium	102 %	99 %
Beryllium	102 %	100 %
Cadmium	104 %	105 %
Calcium	---	---
Chromium	99 %	108 %
Cobalt	100 %	98 %
Copper	108 %	40 %
Iron	---	---
Magnesium	---	---
Manganese	84 %	89 %
Nickel	168 %	0 %
Potassium	---	---
Silver	100 %	98 %
Sodium	---	---
Vanadium	100 %	95 %
Zinc	11 %	68 %
Mercury (7471)		
Mercury	107 %	106 %
Lead (7421)		
Lead	---	---

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LOG NO: S1-36674

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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
36674-7	GML1 Matrix Spike (S1-36621) (% Recovery)
36674-8	GML1 Matrix Spike Duplicate (S1-36621) (% Recovery)

PARAMETER	36674-7	36674-8
Selenium (7740)		
Selenium	76.0 %	94.0 %
Arsenic (7060)		
Arsenic	---	---
Thallium (7841)		
Thallium	77 %	78 %
Cyanide (9010A)		
Cyanide, Total	35 %	41 %
Date Analyzed	---	---

Methods: CLP

*Semivolatiles (8270) duplicate results for sample PA-B1 0-2': 690J, 2000J, 960J, 3400J, 5100J, 1700J, 960J, 440J, 1300J, 1600J, 1800J, 5400J, 3600J, 10000B, 8100, 23000, 13000, 5700 3300J AND 13000.

*Semivolatiles (8270) duplicate results for sample PB-B1 0-2': 2000, 880, 1600, 1000, 1400, 170J, 170J, 310J, 760, 2900, 490U, 490U, 490U, 4300, 1800, 1900B, 1200, 4000, 490U, 1000, and 1000.

Janette D. Long

Janette D. Long

SL SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

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LOG NO: S1-36697

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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED	SDG#
36697-1	PC-B1 (0-1.5')	10-21-91	GMS02
36697-2	PD-B1 (0-1.5')	10-21-91	
36697-3	PE-B1 (0-2.0')	10-21-91	

PARAMETER	36697-1	36697-2	36697-3
Volatiles by GC/MS (8240)			
Chloromethane, ug/kg dw	94U	98U	130U
Bromomethane, ug/kg dw	94U	98U	130U
Vinyl Chloride, ug/kg dw	94U	98U	130U
Chloroethane, ug/kg dw	94U	98U	130U
Methylene Chloride, ug/kg dw	28BJ	94B	33BJ
Acetone, ug/kg dw	430B	1700B	890B
Carbon Disulfide, ug/kg dw	8J	27J	19J
1,1-Dichloroethene, ug/kg dw	47U	49U	64U
1,1-Dichloroethane, ug/kg dw	47U	49U	64U
cis/trans-1,2-Dichloroethylene, ug/kg dw	47U	49U	64U
Chloroform, ug/kg dw	47U	49U	64U
1,2-Dichloroethane, ug/kg dw	47U	49U	64U
2-Butanone, ug/kg dw	94U	230B	130U
1,1,1-Trichloroethane, ug/kg dw	47U	49U	64U
Carbon Tetrachloride, ug/kg dw	47U	49U	64U
Vinyl Acetate, ug/kg dw	94U	98U	130U
Bromodichloromethane, ug/kg dw	47U	49U	64U
1,1,2,2-Tetrachloroethane, ug/kg dw	47U	49U	64U
1,2-Dichloropropane, ug/kg dw	47U	49U	64U
Trans-1,3-Dichloropropene, ug/kg dw	47U	49U	64U
Trichloroethene, ug/kg dw	47U	49U	64U

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Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
36697-4	PC-B2 (1.5-3.5')	10-21-91
36697-5	PC-B3 (3.5-5.5')	10-21-91
36697-6	PD-B2 (2.0-4.0')	10-21-91
36697-7	PD-B3 (4.0-6.0')	10-21-91
36697-8	PE-B2 (4.0-6.0')	10-21-91

PARAMETER	36697-4	36697-5	36697-6	36697-7	36697-8
Pesticides (8080)					
Aroclor-1016, ug/kg dw	120U	120U	120U	110U	110U
Aroclor-1221, ug/kg dw	120U	120U	120U	110U	110U
Aroclor-1232, ug/kg dw	120U	120U	120U	110U	110U
Aroclor-1242, ug/kg dw	120U	120U	120U	110U	110U
Aroclor-1248, ug/kg dw	420	120U	120U	110U	110U
Aroclor-1254, ug/kg dw	250U	220J	240U	210U	230U
Aroclor-1260, ug/kg dw	250U	240U	240U	210U	230U
Date Extracted	11.01.91	11.01.91	11.01.91	11.01.91	11.01.91
Date Analyzed	12.04.91	12.04.91	12.04.91	12.04.91	12.04.91

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SL SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

5102 LaRoche Avenue • Savannah, GA 31404 • (912) 354-7858 • Fax (912) 352-0165

LOG NO: S1-36697

Received: 22 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS02/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
36697-4	PC-B2 (1.5-3.5')	10-21-91
36697-5	PC-B3 (3.5-5.5')	10-21-91
36697-6	PD-B2 (2.0-4.0')	10-21-91
36697-7	PD-B3 (4.0-6.0')	10-21-91
36697-8	PE-B2 (4.0-6.0')	10-21-91

PARAMETER	36697-4	36697-5	36697-6	36697-7	36697-8
Metals (6010)					
Aluminum, mg/kg dw	21000*	7010*	21500*	11000*	16300*
Antimony, mg/kg dw	14.2UN*	14.2UN*	13.7UN*	12.8UN*	14.2UN*
Barium, mg/kg dw	241	724	294	252	272
Beryllium, mg/kg dw	1.4U	1.4U	1.4U	1.3U	1.4U
Cadmium, mg/kg dw	12.5N*	1.4UN*	36.6N*	1.3UN*	1.5W*
Calcium, mg/kg dw	5150	12000	5870	17200	18200
Chromium, mg/kg dw	47.3N	12.6N	50.5N	16.6N	21.4N
Cobalt, mg/kg dw	10.1B	11.1B	11.0B	8.1B	8.2B
Copper, mg/kg dw	66.1N	321N	46.8N	28.8N	29.0N
Iron, mg/kg dw	18600*	18700*	19100*	16200*	24000*
Magnesium, mg/kg dw	4930	6540	4830	7770	7670
Manganese, mg/kg dw	110N	582N	117N	337N	702N
Nickel, mg/kg dw	127*	41.4*	105*	18.8*	21.2*
Potassium, mg/kg dw	3100	1460	2910	2180	2980
Silver, mg/kg dw	2.8UN	2.8UN	2.7UN	2.6UN	2.8UN
Sodium , mg/kg dw	254B	221B	231B	211B	276B
Vanadium, mg/kg dw	50.0	22.4	58.2	30.6	43.6
Zinc, mg/kg dw	3500	1090	5280	94.9	84.2
Date Analyzed	11.07.91	11.07.91	11.07.91	11.07.91	11.07.91

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LOG NO: S1-36697

Received: 22 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS02/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
36697-4	PC-B2 (1.5-3.5')	10-21-91
36697-5	PC-B3 (3.5-5.5')	10-21-91
36697-6	PD-B2 (2.0-4.0')	10-21-91
36697-7	PD-B3 (4.0-6.0')	10-21-91
36697-8	PE-B2 (4.0-6.0')	10-21-91

PARAMETER	36697-4	36697-5	36697-6	36697-7	36697-8
Mercury (7471)					
Mercury , mg/kg dw	0.080	0.040	0.080	0.060	0.030
Date Analyzed	11.18.91	11.18.91	11.18.91	11.18.91	11.18.91
Lead (7421)					
Lead, mg/kg dw	38.2*	15.2*	53.4*	10.8*	13.7*
Date Analyzed	11.29.91	11.27.91	11.29.91	11.27.91	11.27.91
Selenium (7740)					
Selenium, mg/kg dw	1.4UWN*	1.5UWN*	1.5UWN*	1.2UN*	1.3UWN*
Date Analyzed	11.17.91	11.17.91	11.28.91	11.17.91	11.17.91
Arsenic (7060)					
Arsenic, mg/kg dw	13.2+N	4.2N	15.1N	6.7N	3.9N
Date Analyzed	11.16.91	11.16.91	11.17.91	11.16.91	11.16.91
Thallium (7841)					
Thallium, mg/kg dw	2.8UW	3.0UWN	3.0UN	2.4UWN	2.6UWN
Date Analyzed	11.27.91	11.27.91	11.21.91	11.27.91	11.27.91
Percent Solids, %	65	67	66	76	71

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LOG NO: S1-36697

Received: 22 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS02/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
36697-9	PE-B3 (2.0-4.0')	10-21-91

PARAMETER	36697-9
Pesticides (8080)	
Aroclor-1016, ug/kg dw	110U
Aroclor-1221, ug/kg dw	110U
Aroclor-1232, ug/kg dw	110U
Aroclor-1242, ug/kg dw	110U
Aroclor-1248, ug/kg dw	110U
Aroclor-1254, ug/kg dw	230U
Aroclor-1260, ug/kg dw	230U
Date Extracted	11.01.91
Date Analyzed	12.04.91

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LOG NO: S1-36697

Received: 22 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS02/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
36697-9	PE-B3 (2.0-4.0')	10-21-91

PARAMETER	36697-9
Metals (6010)	
Aluminum, mg/kg dw	9910*
Antimony, mg/kg dw	13.4UN*
Barium, mg/kg dw	241
Beryllium, mg/kg dw	1.3U
Cadmium, mg/kg dw	3.6N*
Calcium, mg/kg dw	7430
Chromium, mg/kg dw	20.7N
Cobalt, mg/kg dw	17.2
Copper, mg/kg dw	33.0N
Iron, mg/kg dw	15800*
Magnesium, mg/kg dw	5100
Manganese, mg/kg dw	101N
Nickel, mg/kg dw	104*
Potassium, mg/kg dw	1900
Silver, mg/kg dw	2.7UW
Sodium , mg/kg dw	177B
Vanadium, mg/kg dw	30.4
Zinc, mg/kg dw	2770
Date Analyzed	11.07.91
Mercury (7471)	
Mercury , mg/kg dw	0.050
Date Analyzed	11.18.91
Lead (7421)	
Lead, mg/kg dw	18.6*
Date Analyzed	11.27.91

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LOG NO: S1-36697

Received: 22 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS02/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
36697-9	PE-B3 (2.0-4.0')	10-21-91

PARAMETER	36697-9
Selenium (7740)	
Selenium, mg/kg dw	1.2UWN*
Date Analyzed	11.17.91
Arsenic (7060)	
Arsenic, mg/kg dw	12.9SN
Date Analyzed	11.16.91
Thallium (7841)	
Thallium, mg/kg dw	2.4UWN
Date Analyzed	11.27.91
Percent Solids, %	71

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LOG NO: S1-36697

Received: 22 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS02/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
36697-10	PD-B1 (0-1.5') Matrix Spike (% Rec)
36697-11	PD-B1 (0-1.5') Matrix Spike Dup (% Rec)

PARAMETER	36697-10	36697-11
Volatiles by GC/MS (8240)		
1,1-Dichloroethene	80 %	93 %
Trichloroethene	64 %	82 %
Benzene	88 %	89 %
Toluene	88 %	88 %
Chlorobenzene	0 %	0 %
Semivolatiles (8270)		
Phenol	68 %	56 %
2-Chlorophenol	41 %	50 %
1,4-Dichlorobenzene	70 %	33 %
N-Nitroso-di-n-propylamine	56 %	46 %
1,2,4-Trichlorobenzene	82 %	47 %
4-Chloro-3-methylphenol	47 %	53 %
Acenaphthene	65 %	48 %
4-Nitrophenol	47 %	36 %
2,4-Dinitrotoluene	27 %	20 %
Pentachlorophenol	36 %	22 %
Pyrene	45 %	20 %
Pesticides (8080)		
Aldrin	---	---
gamma-BHC	---	---
4,4'-DDT	---	---
Dieldrin	---	---
Endrin	---	---
Heptachlor	---	---

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Received: 22 OCT 91

Mr. Brian Blum
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125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS02/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
36697-10	PD-B1 (0-1.5') Matrix Spike (% Rec)
36697-11	PD-B1 (0-1.5') Matrix Spike Dup (% Rec)

PARAMETER	36697-10	36697-11
Metals (6010)		
Aluminum	---	---
Antimony	67 %	108 %
Barium	---	---
Beryllium	103 %	101 %
Cadmium	---	---
Calcium	---	---
Chromium	76 %	49 %
Cobalt	104 %	101 %
Copper	---	---
Iron	---	---
Magnesium	---	---
Manganese	136 %	142 %
Nickel	---	---
Potassium	---	---
Silver	60 %	53 %
Sodium	---	---
Vanadium	105 %	102 %
Zinc	---	---
Mercury (7471)		
Mercury	98 %	94 %
Lead (7421)		
Lead	---	---
Selenium (7740)		
Selenium	---	---

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LOG NO: S1-36697

Received: 22 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS02/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
36697-10	PD-B1 (0-1.5') Matrix Spike (% Rec)
36697-11	PD-B1 (0-1.5') Matrix Spike Dup (% Rec)

PARAMETER	36697-10	36697-11
Arsenic (7060)		
Arsenic	---	---
Thallium (7841)		
Thallium	62 %	61 %
Cyanide (9010A)		
Cyanide, Total	---	---

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LOG NO: S1-36697

Received: 22 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS02/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
36697-12	PD-B2 (2.4') Matrix Spike (% Rec)
36697-13	PD-B2 (2.4') Matrix Spike Dup (% Rec)

PARAMETER	36697-12	36697-13
Metals (6010)		
Aluminum	---	---
Antimony	35 %	29 %
Barium	96 %	93 %
Beryllium	105 %	103 %
Cadmium	---	---
Calcium	---	---
Chromium	90 %	103 %
Cobalt	95 %	94 %
Copper	176 %	188 %
Iron	---	---
Magnesium	---	---
Manganese	88 %	82 %
Nickel	118 %	117 %
Potassium	---	---
Silver	94 %	91 %
Sodium	---	---
Vanadium	87 %	82 %
Zinc	---	---
Mercury (7471)		
Mercury	83 %	86 %
Lead (7421)		
Lead	96 %	---
Selenium (7740)		
Selenium	77 %	55 %

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LOG NO: S1-36697

Received: 22 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS02/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
36697-12	PD-B2 (2.4') Matrix Spike (% Rec)
36697-13	PD-B2 (2.4') Matrix Spike Dup (% Rec)

PARAMETER	36697-12	36697-13
Arsenic (7060)		
Arsenic	45 %	23 %
Thallium (7841)		
Thallium	92 %	103 %
Pesticides (8080)		
Aldrin	---	---
gamma-BHC	---	---
4,4'-DDT	---	---
Dieldrin	---	---
Endrin	---	---
Heptachlor	---	---

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LOG NO: S1-36697

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Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS02/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
36697-14	Equipment Blank 10.21.91 (1330)	10-21-91

PARAMETER	36697-14
Metals (6010)	
Aluminum, ug/l	200U
Antimony, ug/l	50.0U
Barium, ug/l	40.8B
Beryllium, ug/l	5.0U
Cadmium, ug/l	5.0U
Calcium, ug/l	844B
Chromium, ug/l	10.0U
Cobalt, ug/l	10.0U
Copper, ug/l	68.9
Iron, ug/l	435
Magnesium, ug/l	168B
Manganese, ug/l	10.0U
Nickel, ug/l	40.0U
Potassium, ug/l	1000U
Silver, ug/l	10.0U
Sodium , ug/l	8140
Vanadium, ug/l	10.0U
Zinc, ug/l	140
Date Analyzed	12.04.91
Mercury (7470)	
Mercury , ug/l	0.20U
Date Analyzed	11.18.91
Lead (7421)	
Lead, ug/l	5.5
Date Analyzed	11.21.91

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LOG NO: S1-36697

Received: 22 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS02/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
36697-14	Equipment Blank 10.21.91 (1330)	10-21-91

PARAMETER	36697-14
Selenium (7740)	
Selenium, ug/l	5.0UW
Date Analyzed	12.10.91
Arsenic (7060)	
Arsenic, ug/l	10.0U
Date Analyzed	12.04.91
Thallium (7481)	
Thallium, ug/l	10.0U
Date Analyzed	11.29.91

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LOG NO: S1-36697

Received: 22 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS02/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
36697-14	Equipment Blank 10.21.91 (1330)	10-21-91

PARAMETER	36697-14
Volatiles by GC/MS (8240)	
Chloromethane, ug/l	10U
Bromomethane, ug/l	10U
Vinyl Chloride, ug/l	10U
Chloroethane, ug/l	10U
Methylene Chloride, ug/l	10
Acetone, ug/l	9.0BJ
Carbon Disulfide, ug/l	5.0U
1,1-Dichloroethene, ug/l	5.0U
1,1-Dichloroethane, ug/l	5.0U
cis/trans-1,2-Dichloroethylene, ug/l	5.0U
Chloroform, ug/l	5.0U
1,2-Dichloroethane, ug/l	5.0U
2-Butanone, ug/l	10U
1,1,1-Trichloroethane, ug/l	5.0U
Carbon Tetrachloride, ug/l	5.0U
Vinyl Acetate, ug/l	10U
Bromodichloromethane, ug/l	5.0U
1,1,2,2-Tetrachloroethane, ug/l	5.0U
1,2-Dichloropropane, ug/l	5.0U
Trans-1,3-Dichloropropene, ug/l	5.0U
Trichloroethene, ug/l	5.0U
Dibromochloromethane, ug/l	5.0U
1,1,2-Trichloroethane, ug/l	5.0U

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LOG NO: S1-36697

Received: 22 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS02/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
36697-14	Equipment Blank 10.21.91 (1330)	10-21-91

PARAMETER	36697-14
Benzene, ug/l	5.0U
Cis-1,3-Dichloropropene, ug/l	5.0U
Bromoform, ug/l	5.0U
2-Hexanone, ug/l	10U
4-Methyl-2-pentanone, ug/l	10U
Tetrachloroethene, ug/l	5.0U
Toluene, ug/l	5.0U
Chlorobenzene, ug/l	5.0U
Ethylbenzene, ug/l	5.0U
Styrene, ug/l	5.0U
Xylenes, ug/l	5.0U
Date Analyzed	11.06.91

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LOG NO: S1-36697

Received: 22 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS02/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
36697-14	Equipment Blank 10.21.91 (1330)	10-21-91

PARAMETER	36697-14
Pesticides (8080)	
alpha-BHC, ug/l	0.050U
beta-BHC, ug/l	0.050U
delta-BHC, ug/l	0.050U
gamma-BHC, ug/l	0.050U
Heptachlor, ug/l	0.050U
Aldrin, ug/l	0.050U
Heptachlor epoxide, ug/l	0.050U
Endosulfan I, ug/l	0.050U
Dieldrin, ug/l	0.10U
4,4'-DDE, ug/l	0.10U
Endrin, ug/l	0.10U
Endosulfan II, ug/l	0.10U
4,4'-DDD, ug/l	0.10U
Endosulfan sulfate, ug/l	0.10U
4,4'-DDT, ug/l	0.10U
Endrin ketone, ug/l	0.10U
Methoxychlor, ug/l	0.50U
alpha-Chlordane, ug/l	0.50U
gamma-Chlordane, ug/l	0.50U
Toxaphene, ug/l	1.0U
Aroclor-1016, ug/l	0.50U
Aroclor-1221, ug/l	0.50U
Aroclor-1232, ug/l	0.50U

SL SAVANNAH LABORATORIES
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LOG NO: S1-36697

Received: 22 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS02/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
36697-14	Equipment Blank 10.21.91 (1330)	10-21-91

PARAMETER	36697-14
Aroclor-1242, ug/l	0.50U
Aroclor-1248, ug/l	0.50U
Aroclor-1254, ug/l	1.0U
Aroclor-1260, ug/l	1.0U
Date Extracted	10.29.91
Date Analyzed	12.05.91
Cyanide (9010)	
Cyanide, Total, ug/l	10U
Date Analyzed	10.25.91

SL SAVANNAH LABORATORIES
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5102 LaRoche Avenue • Savannah, GA 31404 • (912) 354-7858 • Fax (912) 352-0165

LOG NO: S1-36697

Received: 22 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS02/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
36697-14	Equipment Blank 10.21.91 (1330)	10-21-91

PARAMETER	36697-14
Semivolatiles (8270)	
Phenol, ug/l	10U
bis(2-Chloroethyl) ether, ug/l	10U
2-Chlorophenol, ug/l	10U
1,3-Dichlorobenzene, ug/l	10U
1,4-Dichlorobenzene, ug/l	10U
Benzyl alcohol, ug/l	10U
1,2-Dichlorobenzene, ug/l	10U
2-Methylphenol (o-cresol), ug/l	10U
Bis(2-chloroisopropyl)ether, ug/l	10U
4-Methylphenol (p-cresol), ug/l	10U
N-Nitroso-di-n-propylamine, ug/l	10U
Hexachloroethane, ug/l	10U
Nitrobenzene, ug/l	10U
Isophorone, ug/l	10U
2-Nitrophenol, ug/l	10U
2,4-Dimethylphenol, ug/l	10U
Benzoic acid, ug/l	50U
bis(2-Chloroethoxy) methane, ug/l	10U
2,4-Dichlorophenol, ug/l	10U
1,2,4-Trichlorobenzene, ug/l	10U
Naphthalene, ug/l	10U
4-Chloroaniline, ug/l	10U
Hexachlorobutadiene, ug/l	10U

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LOG NO: S1-36697

Received: 22 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS02/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
36697-14	Equipment Blank 10.21.91 (1330)	10-21-91

PARAMETER	36697-14
4-Chloro-3-methylphenol, ug/l	10U
2-Methylnaphthalene, ug/l	10U
Hexachlorocyclopentadiene, ug/l	10U
2,4,6-Trichlorophenol, ug/l	10U
2,4,5-Trichlorophenol, ug/l	50U
2-Nitroaniline, ug/l	50U
3-Nitroaniline, ug/l	50U
Acenaphthene, ug/l	10U
2,4-Dinitrophenol, ug/l	50U
4-Nitrophenol, ug/l	50U
Dibenzofuran, ug/l	10U
2,4-Dinitrotoluene, ug/l	10U
2,6-Dinitrotoluene, ug/l	10U
Diethylphthalate, ug/l	10U
4-Chlorophenyl-phenyl ether, ug/l	10U
Fluorene, ug/l	10U
4-Nitroaniline, ug/l	50U
4,6-Dinitro-2-methylphenol, ug/l	50U
N-Nitrosodiphenylamine/Diphenylamine, ug/l	10U
4-Bromophenyl-phenyl-ether, ug/l	10U
Hexachlorobenzene, ug/l	10U
Pentachlorophenol, ug/l	50U
Phenanthrene, ug/l	10U
Anthracene, ug/l	10U

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LOG NO: S1-36697

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Project: SDG#GMS02/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
36697-14	Equipment Blank 10.21.91 (1330)	10-21-91

PARAMETER	36697-14
Di-n-butylphthalate, ug/l	10U
Fluoranthene, ug/l	10U
Pyrene, ug/l	10U
Butylbenzylphthalate, ug/l	10U
3,3'-Dichlorobenzidine, ug/l	20U
Benzo(a)anthracene, ug/l	10U
bis(2-Ethylhexyl) phthalate, ug/l	10U
Chrysene, ug/l	10U
Di-n-octylphthalate, ug/l	10U
Benzo(b)fluoranthene, ug/l	10U
Benzo(k)fluoranthene, ug/l	10U
Benzo(a)pyrene, ug/l	10U
Indeno (1,2,3-cd)pyrene, ug/l	10U
Dibenzo(a,h)anthracene, ug/l	10U
Benzo(g,h,i)perylene, ug/l	10U
2-Chloronaphthalene, ug/l	10U
Date Extracted	10.30.91
Date Analyzed	11.05.91

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LOG NO: S1-36697

Received: 22 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS02/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
36697-15	Equipment Blank 10.21.91 (1500)	10-21-91

PARAMETER	36697-15
Metals (6010)	
Aluminum, ug/l	200U
Antimony, ug/l	50.0U
Barium, ug/l	10U
Beryllium, ug/l	5.0U
Cadmium, ug/l	5.0U
Calcium, ug/l	462B
Chromium, ug/l	10.0U
Cobalt, ug/l	10.0U
Copper, ug/l	25.0U
Iron, ug/l	98.4B
Magnesium, ug/l	50.0U
Manganese, ug/l	10.0U
Nickel, ug/l	40.0U
Potassium, ug/l	1000U
Silver, ug/l	10.0U
Sodium , ug/l	665B
Vanadium, ug/l	10.0U
Zinc, ug/l	375
Date Analyzed	12.04.91
Mercury (7470)	
Mercury , ug/l	0.20U
Date Analyzed	11.18.91
Lead (7421)	
Lead, ug/l	3.0U
Date Analyzed	11.27.91

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LOG NO: S1-36697

Received: 22 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS02/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
36697-15	Equipment Blank 10.21.91 (1500)	10-21-91

PARAMETER	36697-15
Selenium (7740)	
Selenium, ug/l	5.0UW
Date Analyzed	12.11.91
Arsenic (7060)	
Arsenic, ug/l	10.0UW
Date Analyzed	12.04.91
Thallium (7481)	
Thallium, ug/l	10.0UW
Date Analyzed	11.27.91
Pesticides (8080)	
Aroclor-1016, ug/l	0.50U
Aroclor-1221, ug/l	0.50U
Aroclor-1232, ug/l	0.50U
Aroclor-1242, ug/l	0.50U
Aroclor-1248, ug/l	0.50U
Aroclor-1254, ug/l	1.0U
Aroclor-1260, ug/l	1.0U
Date Extracted	10.29.91
Date Analyzed	12.03.91

Methods: CLP

Janette D. Long

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LOG NO: S1-37031

Received: 24 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS02/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED	SDG#
37031-1	PF-B1 (0-2')	10-22-91	GMS02
37031-2	PG-B1 (0-2')	10-22-91	
37031-3	PH-B1 (0-2')	10-23-91	

PARAMETER	37031-1	37031-2	37031-3
Volatiles by GC/MS (8240)			
Chloromethane, ug/kg dw	120U	26U	100U
Bromomethane, ug/kg dw	120U	26U	100U
Vinyl Chloride, ug/kg dw	120U	26U	100U
Chloroethane, ug/kg dw	120U	26U	100U
Methylene Chloride, ug/kg dw	50B	19B	39BJ
Acetone, ug/kg dw	350B	140B	270B
Carbon Disulfide, ug/kg dw	13J	13J	10J
1,1-Dichloroethene, ug/kg dw	61U	13U	50U
1,1-Dichloroethane, ug/kg dw	61U	13U	50U
cis/trans-1,2-Dichloroethylene, ug/kg dw	61U	13U	50U
Chloroform, ug/kg dw	61U	13U	50U
1,2-Dichloroethane, ug/kg dw	61U	13U	50U
2-Butanone, ug/kg dw	180B	81B	200B
1,1,1-Trichloroethane, ug/kg dw	61U	13U	50U
Carbon Tetrachloride, ug/kg dw	61U	13U	50U
Vinyl Acetate, ug/kg dw	120U	26U	100U
Bromodichloromethane, ug/kg dw	61U	13U	50U
1,1,2,2-Tetrachloroethane, ug/kg dw	61U	13U	50U
1,2-Dichloropropane, ug/kg dw	61U	13U	50U
Trans-1,3-Dichloropropene, ug/kg dw	61U	13U	50U
Trichloroethene, ug/kg dw	61U	13U	50U

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LOG NO: S1-37031

Received: 24 OCT 91

Mr. Brian Blum
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125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS02/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED	SDG#
37031-1	PF-B1 (0-2')	10-22-91	GMS02
37031-2	PG-B1 (0-2')	10-22-91	
37031-3	PH-B1 (0-2')	10-23-91	

PARAMETER	37031-1	37031-2	37031-3
Dibromochloromethane, ug/kg dw	61U	13U	50U
1,1,2-Trichloroethane, ug/kg dw	61U	13U	50U
Benzene, ug/kg dw	61U	13U	50U
Cis-1,3-Dichloropropene, ug/kg dw	61U	13U	50U
Bromoform, ug/kg dw	61U	13U	50U
2-Hexanone, ug/kg dw	120U	26U	100U
4-Methyl-2-pentanone, ug/kg dw	120U	26U	100U
Tetrachloroethene, ug/kg dw	30J	13U	50U
Toluene, ug/kg dw	25J	13U	69
Chlorobenzene, ug/kg dw	1100	92	710
Ethylbenzene, ug/kg dw	44J	8J	15J
Styrene, ug/kg dw	61U	13U	50U
Xylenes, ug/kg dw	61U	13U	50U
Date Analyzed	11.01.91	11.01.91	11.01.91

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Received: 24 OCT 91

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Project: SDG#GMS02/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED	SDG#
37031-1	PF-B1 (0-2')	10-22-91	GMS02
37031-2	PG-B1 (0-2')	10-22-91	
37031-3	PH-B1 (0-2')	10-23-91	

PARAMETER	37031-1	37031-2	37031-3
Semivolatiles (8270)			
Phenol, ug/kg dw	810U	860U	660U
bis(2-Chloroethyl) ether, ug/kg dw	810U	860U	660U
2-Chlorophenol, ug/kg dw	110J	860U	660U
1,3-Dichlorobenzene, ug/kg dw	1100	860U	410J
1,4-Dichlorobenzene, ug/kg dw	5700	110J	1300
Benzyl alcohol, ug/kg dw	810U	860U	660U
1,2-Dichlorobenzene, ug/kg dw	11000	860U	2500
2-Methylphenol (o-cresol), ug/kg dw	810U	860U	660U
Bis(2-chloroisopropyl)ether, ug/kg dw	810U	860U	660U
4-Methylphenol (p-cresol), ug/kg dw	810U	860U	120J
N-Nitroso-di-n-propylamine, ug/kg dw	810U	860U	660U
Hexachloroethane, ug/kg dw	810U	860U	660U
Nitrobenzene, ug/kg dw	810U	860U	660U
Isophorone, ug/kg dw	270J	860U	660U
2-Nitrophenol, ug/kg dw	810U	860U	660U
2,4-Dimethylphenol, ug/kg dw	140J	860U	87J
Benzoic acid, ug/kg dw	4100U	4300U	3300U
bis(2-Chloroethoxy) methane, ug/kg dw	810U	860U	660U
2,4-Dichlorophenol, ug/kg dw	250J	860U	96J
1,2,4-Trichlorobenzene, ug/kg dw	12000	860U	2300
Naphthalene, ug/kg dw	500J	860U	210J

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LOG NO: S1-37031

Received: 24 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS02/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED	SDG#
37031-1	PF-B1 (0-2')	10-22-91	GMS02
37031-2	PG-B1 (0-2')	10-22-91	
37031-3	PH-B1 (0-2')	10-23-91	

PARAMETER	37031-1	37031-2	37031-3
4-Chloroaniline, ug/kg dw	810U	860U	660U
Hexachlorobutadiene, ug/kg dw	810U	860U	660U
4-Chloro-3-methylphenol, ug/kg dw	810U	860U	660U
2-Methylnaphthalene, ug/kg dw	320J	860U	140J
Hexachlorocyclopentadiene, ug/kg dw	810U	860U	660U
2,4,6-Trichlorophenol, ug/kg dw	810U	860U	660U
2,4,5-Trichlorophenol, ug/kg dw	4100U	4300U	3300U
2-Chloronaphthalene, ug/kg dw	810U	860U	660U
2-Nitroaniline, ug/kg dw	4100U	4300U	3300U
Dimethylphthalate, ug/kg dw	810U	860U	660U
Acenaphthylene, ug/kg dw	810U	860U	660U
3-Nitroaniline, ug/kg dw	4100U	4300U	3300U
Acenaphthene, ug/kg dw	480J	860U	660U
2,4-Dinitrophenol, ug/kg dw	4100U	4300U	3300U
4-Nitrophenol, ug/kg dw	4100U	4300U	3300U
Dibenzofuran, ug/kg dw	280J	860U	660U
2,4-Dinitrotoluene, ug/kg dw	810U	860U	660U
2,6-Dinitrotoluene, ug/kg dw	810U	860U	660U
Diethylphthalate, ug/kg dw	810U	860U	660U
4-Chlorophenyl-phenyl ether, ug/kg dw	810U	860U	660U
Fluorene, ug/kg dw	880	860U	120J
4-Nitroaniline, ug/kg dw	4100U	4300U	3300U

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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED	SDG#
37031-1	PF-B1 (0-2')	10-22-91	GMS02
37031-2	PG-B1 (0-2')	10-22-91	
37031-3	PH-B1 (0-2')	10-23-91	

PARAMETER	37031-1	37031-2	37031-3
4,6-Dinitro-2-methylphenol, ug/kg dw	4100U	4300U	3300U
N-Nitrosodiphenylamine/Diphenylamine, ug/kg dw	810U	860U	660U
4-Bromophenyl-phenyl-ether, ug/kg dw	810U	860U	660U
Hexachlorobenzene, ug/kg dw	810U	860U	660U
Pentachlorophenol, ug/kg dw	1600J	4300U	390J
Phenanthrene, ug/kg dw	1700	860U	350J
Anthracene, ug/kg dw	1300	860U	660U
Di-n-butylphthalate, ug/kg dw	810U	860U	660U
Fluoranthene, ug/kg dw	5200	860U	430J
Pyrene, ug/kg dw	16000E	860U	1200
Butylbenzylphthalate, ug/kg dw	810U	860U	660U
3,3'-Dichlorobenzidine, ug/kg dw	1600U	1700U	1300U
Benzo(a)anthracene, ug/kg dw	5400	860U	360J
bis(2-Ethylhexyl) phthalate, ug/kg dw	820	86J	910
Chrysene, ug/kg dw	4700	860U	510J
Di-n-octylphthalate, ug/kg dw	810U	860U	660U
Benzo(b)fluoranthene, ug/kg dw	5600	860U	770
Benzo(k)fluoranthene, ug/kg dw	5200	860U	780
Benzo(a)pyrene, ug/kg dw	5300	170J	680
Indeno (1,2,3-cd)pyrene, ug/kg dw	2100	860U	460J
Dibenzo(a,h)anthracene, ug/kg dw	810U	860U	660U
Benzo(g,h,i)perylene, ug/kg dw	2100	860U	330J
Date Extracted	10.31.91	10.31.91	10.31.91
Date Analyzed	11.11.23	11.23.91	11.11.26

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LOG NO: S1-37031

Received: 24 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS02/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED	SDG#
37031-1	PF-B1 (0-2')	10-22-91	GMS02
37031-2	PG-B1 (0-2')	10-22-91	
37031-3	PH-B1 (0-2')	10-23-91	

PARAMETER	37031-1	37031-2	37031-3
Pesticides (8080)			
alpha-BHC, ug/kg dw	3900U	2100U	1600U
beta-BHC, ug/kg dw	3900U	2100U	1600U
delta-BHC, ug/kg dw	3900U	2100U	1600U
gamma-BHC, ug/kg dw	3900U	2100U	1600U
Heptachlor, ug/kg dw	3900U	2100U	1600U
Aldrin, ug/kg dw	3900U	2100U	1600U
Heptachlor epoxide, ug/kg dw	3900U	2100U	1600U
Endosulfan I, ug/kg dw	3900U	2100U	1600U
Dieldrin, ug/kg dw	7800U	4200U	3200U
4,4'-DDE, ug/kg dw	7800U	4200U	3200U
Endrin, ug/kg dw	7800U	4200U	3200U
Endosulfan II, ug/kg dw	7800U	4200U	3200U
4,4'-DDD, ug/kg dw	7800U	4200U	3200U
Endosulfan sulfate, ug/kg dw	7800U	4200U	3200U
4,4'-DDT, ug/kg dw	7800U	4200U	3200U
Endrin ketone, ug/kg dw	7800U	4200U	3200U
Methoxychlor, ug/kg dw	39000U	21000U	16000U
alpha-Chlordane, ug/kg dw	39000U	21000U	16000U
gamma-Chlordane, ug/kg dw	39000U	21000U	16000U
Toxaphene, ug/kg dw	78000U	42000U	32000U
Aroclor-1016, ug/kg dw	39000U	21000U	16000U

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Project: SDG#GMS02/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED	SDG#
37031-1	PF-B1 (0-2')	10-22-91	GMS02
37031-2	PG-B1 (0-2')	10-22-91	
37031-3	PH-B1 (0-2')	10-23-91	

PARAMETER	37031-1	37031-2	37031-3
Aroclor-1221, ug/kg dw	39000U	21000U	16000U
Aroclor-1232, ug/kg dw	39000U	21000U	16000U
Aroclor-1242, ug/kg dw	39000U	21000U	16000U
Aroclor-1248, ug/kg dw	92000	20000J	54000
Aroclor-1254, ug/kg dw	55000J	30000J	13000J
Aroclor-1260, ug/kg dw	78000U	42000	32000U
Date Extracted	11.06.91	11.06.91	11.06.91
Date Analyzed	12.09.91	12.09.91	12.09.91

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LOG NO: S1-37031

Received: 24 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS02/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED	SDG#
37031-1	PF-B1 (0-2')	10-22-91	GMS02
37031-2	PG-B1 (0-2')	10-22-91	
37031-3	PH-B1 (0-2')	10-23-91	

PARAMETER	37031-1	37031-2	37031-3
Metals (6010)			
Aluminum, mg/kg dw	9890*	6970*	12100*
Antimony, mg/kg dw	42.6N	44.5N*	20.7B
Barium, mg/kg dw	4110	8850	2040
Beryllium, mg/kg dw	2.3U	2.3U	1.9U
Cadmium, mg/kg dw	243	112	80.7N*
Calcium, mg/kg dw	11100	9360	11200
Chromium, mg/kg dw	107N	104N	63.1N
Cobalt, mg/kg dw	29.9	24.9	12.2B
Copper, mg/kg dw	12300N	17500N	3560N
Iron, mg/kg dw	86400*	62900*	36100*
Magnesium, mg/kg dw	3730	2570	3670
Manganese, mg/kg dw	557N	132N	141N
Nickel, mg/kg dw	2020	1440*	597*
Potassium, mg/kg dw	1610B	769B	1900B
Silver, mg/kg dw	16.1N	17.4N	6.0N
Sodium , mg/kg dw	355B	307B	203B
Vanadium, mg/kg dw	54.9	54.4	47.6
Zinc, mg/kg dw	42800	31000	13100
Date Analyzed	11.06.91	11.06.91	11.06.91
Mercury (7471)			
Mercury , mg/kg dw	3.9	0.29	1.7
Date Analyzed	11.18.91	11.18.91	11.18.91

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LOG NO: S1-37031

Received: 24 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS02/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED	SDG#
37031-1	PF-B1 (0-2')	10-22-91	GMS02
37031-2	PG-B1 (0-2')	10-22-91	
37031-3	PH-B1 (0-2')	10-23-91	

PARAMETER	37031-1	37031-2	37031-3
Lead (7421)			
Lead, mg/kg dw	2310*	1810*	1340*
Date Analyzed	12.10.91	11.29.91	12.10.91
Selenium (7740)			
Selenium, mg/kg dw	8.7SN*	3.7SN*	4.3SN*
Date Analyzed	11.28.91	11.28.91	11.28.91
Arsenic (7060)			
Arsenic, mg/kg dw	83.2N	95.7N	52.9SN
Date Analyzed	12.02.91	12.02.91	12.02.91
Thallium (7841)			
Thallium, mg/kg dw	4.8UWN	4.7UWN	3.6UWN
Date Analyzed	11.27.91	11.27.91	11.27.91
Cyanide (9010A)			
Cyanide, Total, mg/kg dw	1.5	0.72	0.70
Date Analyzed	11.04-07	11.04-07	11.04-07
Percent Solids, %	41	38	50

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LOG NO: S1-37031

Received: 24 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS02/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
37031-4	PF-B2 (2-4')	10-22-91
37031-5	PF-B3 (4-6')	10-22-91
37031-6	PG-B2 (2-4')	10-23-91
37031-7	PG-B3 (4.6')	10-23-91
37031-8	PH-B2 (2-4')	10-23-91

PARAMETER	37031-4	37031-5	37031-6	37031-7	37031-8
Metals (6010)					
Aluminum, mg/kg dw	20200*	10600*	8300*	13300*	9180*
Antimony, mg/kg dw	14.2UN*	12.1UN*	13.3UN*	12.9UN*	12.8UN*
Barium, mg/kg dw	312	259	172	248	204
Beryllium, mg/kg dw	1.4U	1.2U	1.3U	1.3U	1.3U
Cadmium, mg/kg dw	7.7	1.2UN*	1.3UN*	11.8N*	5.8N*
Calcium, mg/kg dw	6520	20600	11300	3880	6190
Chromium, mg/kg dw	49.2N	15.5N	13.3N	32.0N	84.5N
Cobalt, mg/kg dw	11.6B	7.3B	17.5	24.4	8.9B
Copper, mg/kg dw	174N	26.7N	16.9N	72.5N	26.5N
Iron, mg/kg dw	21800*	16200*	12600*	12900*	9480*
Magnesium, mg/kg dw	5200	8290	7050	3660	4240
Manganese, mg/kg dw	132N	493N	207N	72.3N	82.2N
Nickel, mg/kg dw	181*	18.7*	37.6*	444*	127*
Potassium, mg/kg dw	2970	2200	1680	1930	1510
Silver, mg/kg dw	2.8UN	2.4UN	2.7UN	2.6UN	2.6UN
Sodium , mg/kg dw	178B	186B	137B	149B	131B
Vanadium, mg/kg dw	59.6	29.4	23.1	35.5	23.7
Zinc, mg/kg dw	4100	69.4	412	6340	2180
Date Analyzed	11.06.91	11.06.91	11.06.91	11.07.91	11.07.91

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Project: SDG#GMS02/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
37031-4	PF-B2 (2-4')	10-22-91
37031-5	PF-B3 (4-6')	10-22-91
37031-6	PG-B2 (2-4')	10-23-91
37031-7	PG-B3 (4.6')	10-23-91
37031-8	PH-B2 (2-4')	10-23-91

PARAMETER	37031-4	37031-5	37031-6	37031-7	37031-8
Mercury (7471)					
Mercury , mg/kg dw	0.090	0.030	0.040	0.030	0.040
Date Analyzed	11.18.91	11.18.91	11.18.91	11.18.91	11.18.91
Lead (7421)					
Lead, mg/kg dw	34.3*	12.5*	11.5*	22.6*	15.4*
Date Analyzed	11.29.91	11.27.91	12.13.91	11.27.91	11.27.91
Selenium (7740)					
Selenium, mg/kg dw	1.4UWN*	1.2UWN*	1.3UWN*	1.3UWN*	1.4UN*
Date Analyzed	11.28.91	11.17.91	11.17.91	11.17.91	11.17.91
Arsenic (7060)					
Arsenic, mg/kg dw	13.1N	4.4N	19.1+N	12.1N	6.4N
Date Analyzed	12.02.91	11.16.91	11.16.91	12.04.91	12.02.91
Thallium (7841)					
Thallium, mg/kg dw	2.9UWN	2.4UWN	2.6UWN	2.7UWN	2.7UWN
Date Analyzed	11.27.91	11.27.91	11.27.91	11.27.91	11.27.91

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LOG NO: S1-37031

Received: 24 OCT 91

Mr. Brian Blum
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125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS02/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
37031-4	PF-B2 (2-4')	10-22-91
37031-5	PF-B3 (4-6')	10-22-91
37031-6	PG-B2 (2-4')	10-23-91
37031-7	PG-B3 (4.6')	10-23-91
37031-8	PH-B2 (2-4')	10-23-91

PARAMETER	37031-4	37031-5	37031-6	37031-7	37031-8
Pesticides (8080)					
Aroclor-1016, ug/kg dw	120U	110U	110U	110U	110U
Aroclor-1221, ug/kg dw	120U	110U	110U	110U	110U
Aroclor-1232, ug/kg dw	120U	110U	110U	110U	110U
Aroclor-1242, ug/kg dw	120U	110U	110U	110U	110U
Aroclor-1248, ug/kg dw	120U	110U	110U	110U	110U
Aroclor-1254, ug/kg dw	250U	210U	400	910	220U
Aroclor-1260, ug/kg dw	250U	210U	220U	250	220U
Date Extracted	11.01.91	11.01.91	11.01.91	11.01.91	11.01.91
Date Analyzed	12.04.91	12.04.91	12.04.91	12.04.91	12.04.91
Percent Solids, %	65	76	74	73	72

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Project: SDG#GMS02/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
37031-9	PH-B3 (4-6')	10-23-91

PARAMETER	37031-9
Metals (6010)	
Aluminum, mg/kg dw	8450*
Antimony, mg/kg dw	14.5UN*
Barium, mg/kg dw	175
Beryllium, mg/kg dw	1.4U
Cadmium, mg/kg dw	5.3N*
Calcium, mg/kg dw	6310
Chromium, mg/kg dw	14.8N
Cobalt, mg/kg dw	12.0B
Copper, mg/kg dw	19.3N
Iron, mg/kg dw	11400*
Magnesium, mg/kg dw	4960
Manganese, mg/kg dw	83.2N
Nickel, mg/kg dw	231*
Potassium, mg/kg dw	1790
Silver, mg/kg dw	2.9UN
Sodium , mg/kg dw	149B
Vanadium, mg/kg dw	27.5
Zinc, mg/kg dw	2390
Date Analyzed	11.07.91
Mercury (7471)	
Mercury , mg/kg dw	0.03
Date Analyzed	11.18.91
Lead (7421)	
Lead, mg/kg dw	11.3*
Date Analyzed	11.27.91

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Received: 24 OCT 91

Mr. Brian Blum
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125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS02/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
37031-9	PH-B3 (4-6')	10-23-91

PARAMETER	37031-9
Selenium (7740)	
Selenium, mg/kg dw	1.4UWN*
Date Analyzed	11.17.91
Arsenic (7060)	
Arsenic, mg/kg dw	15.5+N
Date Analyzed	12.13.91
Thallium (7841)	
Thallium, mg/kg dw	2.8UWN
Date Analyzed	11.27.91
Pesticides (8080)	
Aroclor-1016, ug/kg dw	120U
Aroclor-1221, ug/kg dw	120U
Aroclor-1232, ug/kg dw	120U
Aroclor-1242, ug/kg dw	120U
Aroclor-1248, ug/kg dw	120U
Aroclor-1254, ug/kg dw	240U
Aroclor-1260, ug/kg dw	240U
Date Extracted	11.01.91
Date Analyzed	12.04.91
Percent Solids, %	68

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Plainview, NY 11803

Project: SDG#GMS02/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
37031-10	PD-B1 (0-1.5') Matrix Spike (% Rec)
37031-11	PD-B1 (0-1.5') Matrix Spike Dup (% Rec)

PARAMETER	37031-10	37031-11
Volatiles by GC/MS (8240)		
1,1-Dichloroethene	80 %	93 %
Trichloroethene	64 %	82 %
Benzene	88 %	89 %
Toluene	88 %	88 %
Chlorobenzene	0 %	0 %
Semivolatiles (8270)		
Phenol	68 %	56 %
2-Chlorophenol	41 %	50 %
1,4-Dichlorobenzene	70 %	33 %
N-Nitroso-di-n-propylamine	56 %	46 %
1,2,4-Trichlorobenzene	82 %	47 %
4-Chloro-3-methylphenol	47 %	53 %
Acenaphthene	65 %	48 %
4-Nitrophenol	47 %	36 %
2,4-Dinitrotoluene	27 %	20 %
Pentachlorophenol	36 %	22 %
Pyrene	45 %	20 %
Pesticides (8080)		
Aldrin	---	---
gamma-BHC	---	---
4,4'-DDT	---	---
Dieldrin	---	---
Heptachlor	---	---

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Plainview, NY 11803

Project: SDG#GMS02/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
37031-10	PD-B1 (0-1.5') Matrix Spike (% Rec)
37031-11	PD-B1 (0-1.5') Matrix Spike Dup (% Rec)

PARAMETER	37031-10	37031-11
Metals (6010)		
Aluminum	---	---
Antimony	67 %	108 %
Barium	---	---
Beryllium	103 %	101 %
Cadmium	---	---
Calcium	---	---
Chromium	76 %	49 %
Cobalt	104 %	101 %
Copper	---	---
Iron	---	---
Magnesium	---	---
Manganese	136 %	142 %
Nickel	---	---
Potassium	---	---
Silver	60 %	53 %
Sodium	---	---
Vanadium	105 %	102 %
Zinc	---	---
Mercury (7471)		
Mercury	98 %	94 %
Lead (7421)		
Lead	---	---
Selenium (7740)		
Selenium	---	---

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Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
37031-10	PD-B1 (0-1.5') Matrix Spike (% Rec)
37031-11	PD-B1 (0-1.5') Matrix Spike Dup (% Rec)

PARAMETER	37031-10	37031-11
Arsenic (7060)		
Arsenic	---	---
Thallium (7841)		
Thallium	62 %	61 %
Cyanide (9010A)		
Cyanide, Total	---	---

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Project: SDG#GMS02/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
37031-12	PD-B2 (2.4') Matrix Spike (% Rec)
37031-13	PD-B2 (2.4') Matrix Spike Dup (% Rec)

PARAMETER	37031-12	37031-13
Metals (6010)		
Aluminum	---	---
Antimony	35 %	29 %
Barium	96 %	93 %
Beryllium	105 %	103 %
Cadmium	---	---
Calcium	---	---
Chromium	90 %	103 %
Cobalt	95 %	94 %
Copper	176 %	188 %
Iron	---	---
Magnesium	---	---
Manganese	88 %	82 %
Nickel	118 %	117 %
Potassium	---	---
Silver	94 %	91 %
Sodium , mg/l	---	---
Vanadium, mg/l	87 %	82 %
Zinc	---	---
Mercury (7471)		
Mercury	83 %	86 %
Lead (7421)		
Lead	96 %	---
Selenium (7740)		
Selenium	77 %	55 %

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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
37031-12	PD-B2 (2.4') Matrix Spike (% Rec)
37031-13	PD-B2 (2.4') Matrix Spike Dup (% Rec)

PARAMETER	37031-12	37031-13
Arsenic (7060)		
Arsenic	45 %	23 %
Thallium (7841)		
Thallium	92 %	103 %
Pesticides (8080)		
Aldrin	---	---
gamma-BHC	---	---
4,4'-DDT	---	---
Dieldrin	---	---
Heptachlor	---	---

Methods: CLP

Janette D. Long

Janette D. Long

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LOG NO: S1-37055

Received: 25 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS03/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED	SDG#
37055-1	PI-B2 (0-2')	10-24-91	GMS03
37055-2	PJ-B2 ((0-1.5')	10-24-91	

PARAMETER	37055-1	37055-2
Volatiles by GC/MS (8240)		
Chloromethane, ug/kg dw	60U	31U
Bromomethane, ug/kg dw	60U	31U
Vinyl Chloride, ug/kg dw	60U	31U
Chloroethane, ug/kg dw	60U	31U
Methylene Chloride, ug/kg dw	37B	16U
Acetone, ug/kg dw	290B	240
Carbon Disulfide, ug/kg dw	11J	35
1,1-Dichloroethene, ug/kg dw	30U	16U
1,1-Dichloroethane, ug/kg dw	30U	16U
cis/trans-1,2-Dichloroethylene, ug/kg dw	30U	16U
Chloroform, ug/kg dw	30U	16U
1,2-Dichloroethane, ug/kg dw	30U	16U
2-Butanone, ug/kg dw	200	31U
1,1,1-Trichloroethane, ug/kg dw	30U	16U
Carbon Tetrachloride, ug/kg dw	30U	16U
Vinyl Acetate, ug/kg dw	60U	31U
Bromodichloromethane, ug/kg dw	30U	16U
1,1,2,2-Tetrachloroethane, ug/kg dw	30U	16U
1,2-Dichloropropane, ug/kg dw	30U	16U
Trans-1,3-Dichloropropene, ug/kg dw	30U	16U
Trichloroethene, ug/kg dw	30U	16U
Dibromochloromethane, ug/kg dw	30U	16U

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Plainview, NY 11803

Project: SDG#GMS03/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED	SDG#
37055-1	PI-B2 (0-2')	10-24-91	GMS03
37055-2	PJ-B2 ((0-1.5')	10-24-91	

PARAMETER	37055-1	37055-2
1,1,2-Trichloroethane, ug/kg dw	30U	16U
Benzene, ug/kg dw	30U	16U
Cis-1,3-Dichloropropene, ug/kg dw	30U	16U
Bromoform, ug/kg dw	30U	16U
2-Hexanone, ug/kg dw	60U	31U
4-Methyl-2-pentanone, ug/kg dw	60U	31U
Tetrachloroethene, ug/kg dw	30U	16U
Toluene, ug/kg dw	30U	16U
Chlorobenzene, ug/kg dw	650	7400E
Ethylbenzene, ug/kg dw	30U	16U
Styrene, ug/kg dw	30U	16U
Xylenes, ug/kg dw	30U	44
Date Analyzed	11.01.91	11.01.91

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LOG NO: S1-37055

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Plainview, NY 11803

Project: SDG#GMS03/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED	SDG#
37055-1	PI-B2 (0-2')	10-24-91	GMS03
37055-2	PJ-B2 ((0-1.5')	10-24-91	

PARAMETER	37055-1	37055-2
Semivolatiles (8270)		
Phenol, ug/kg dw	660U	1000U
bis(2-Chloroethyl) ether, ug/kg dw	660U	1000U
2-Chlorophenol, ug/kg dw	660U	1000U
1,3-Dichlorobenzene, ug/kg dw	660U	2000
1,4-Dichlorobenzene, ug/kg dw	1100	12000
Benzyl alcohol, ug/kg dw	660U	1000U
1,2-Dichlorobenzene, ug/kg dw	660U	1000U
2-Methylphenol (o-cresol), ug/kg dw	660U	1000U
Bis(2-chloroisopropyl)ether, ug/kg dw	660U	1000U
4-Methylphenol (p-cresol), ug/kg dw	660U	1000U
N-Nitroso-di-n-propylamine, ug/kg dw	660U	1000U
Hexachloroethane, ug/kg dw	660U	1000U
Nitrobenzene, ug/kg dw	660U	1000U
Isophorone, ug/kg dw	660U	1000U
2-Nitrophenol, ug/kg dw	660U	1000U
2,4-Dimethylphenol, ug/kg dw	660U	1000U
Benzoic acid, ug/kg dw	3300U	5100U
bis(2-Chloroethoxy) methane, ug/kg dw	660U	1000U
2,4-Dichlorophenol, ug/kg dw	660U	1000U
1,2,4-Trichlorobenzene, ug/kg dw	380J	1000U
Naphthalene, ug/kg dw	190J	2100
4-Chloroaniline, ug/kg dw	660U	1000U

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Project: SDG#GMS03/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED	SDG#
37055-1	PI-B2 (0-2')	10-24-91	GMS03
37055-2	PJ-B2 ((0-1.5')	10-24-91	

PARAMETER	37055-1	37055-2
Hexachlorobutadiene, ug/kg dw	660U	1000U
4-Chloro-3-methylphenol, ug/kg dw	660U	1000U
2-Methylnaphthalene, ug/kg dw	660U	7000
Hexachlorocyclopentadiene, ug/kg dw	660U	1000U
2,4,6-Trichlorophenol, ug/kg dw	660U	1000U
2,4,5-Trichlorophenol, ug/kg dw	3300U	5100U
2-Chloronaphthalene, ug/kg dw	660U	1000U
2-Nitroaniline, ug/kg dw	3300U	5100U
Dimethylphthalate, ug/kg dw	660U	1000U
Acenaphthylene, ug/kg dw	660U	1000U
3-Nitroaniline, ug/kg dw	3300U	5100U
Acenaphthene, ug/kg dw	98J	2600
2,4-Dinitrophenol, ug/kg dw	3300U	5100U
4-Nitrophenol, ug/kg dw	3300U	5100U
Dibenzofuran, ug/kg dw	70J	2000
2,4-Dinitrotoluene, ug/kg dw	660U	1000U
2,6-Dinitrotoluene, ug/kg dw	660U	1000U
Diethylphthalate, ug/kg dw	660U	1000U
4-Chlorophenyl-phenyl ether, ug/kg dw	660U	1000U
Fluorene, ug/kg dw	150J	4600
4-Nitroaniline, ug/kg dw	3300U	5100U
4,6-Dinitro-2-methylphenol, ug/kg dw	3300U	5100U
N-Nitrosodiphenylamine/Diphenylamine, ug/kg dw	660U	1000U

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D71

LOG NO: S1-37055

Received: 25 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS03/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED	SDG#
37055-1	PI-B2 (0-2')	10-24-91	GMS03
37055-2	PJ-B2 ((0-1.5')	10-24-91	

PARAMETER	37055-1	37055-2
4-Bromophenyl-phenyl-ether, ug/kg dw	660U	1000U
Hexachlorobenzene, ug/kg dw	660U	1000U
Pentachlorophenol, ug/kg dw	320J	5100U
Phenanthrene, ug/kg dw	320J	2900
Anthracene, ug/kg dw	660U	2700
Di-n-butylphthalate, ug/kg dw	660U	1000U
Fluoranthene, ug/kg dw	580J	4700
Pyrene, ug/kg dw	1900	12000D
Butylbenzylphthalate, ug/kg dw	660U	1000U
3,3'-Dichlorobenzidine, ug/kg dw	1300U	2100U
Benzo(a)anthracene, ug/kg dw	700	5000
bis(2-Ethylhexyl) phthalate, ug/kg dw	660U	1000U
Chrysene, ug/kg dw	1200	7000
Di-n-octylphthalate, ug/kg dw	660U	1000U
Benzo(b)fluoranthene, ug/kg dw	1600	6100
Benzo(k)fluoranthene, ug/kg dw	980	5000
Benzo(a)pyrene, ug/kg dw	900	4400
Indeno (1,2,3-cd)pyrene, ug/kg dw	700	2800
Dibenzo(a,h)anthracene, ug/kg dw	660U	1000U
Benzo(g,h,i)perylene, ug/kg dw	880	3200
Date Extracted	10.31.91	10.31.91
Date Analyzed	11.11.91	11.12.91

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Received: 25 OCT 91

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Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS03/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED	SDG#
37055-1	PI-B2 (0-2')	10-24-91	GMS03
37055-2	PJ-B2 ((0-1.5')	10-24-91	

PARAMETER	37055-1	37055-2
Pesticides (8080)		
alpha-BHC, ug/kg dw	1600U	25000U
beta-BHC, ug/kg dw	1600U	25000U
delta-BHC, ug/kg dw	1600U	25000U
gamma-BHC, ug/kg dw	1600U	25000U
Heptachlor, ug/kg dw	1600U	25000U
Aldrin, ug/kg dw	1600U	25000U
Heptachlor epoxide, ug/kg dw	1600U	25000U
Endosulfan I, ug/kg dw	1600U	25000U
Dieldrin, ug/kg dw	3200U	50000U
4,4'-DDE, ug/kg dw	3200U	50000U
Endrin, ug/kg dw	3200U	50000U
Endosulfan II, ug/kg dw	3200U	50000U
4,4'-DDD, ug/kg dw	3200U	50000U
Endosulfan sulfate, ug/kg dw	3200U	50000U
4,4'-DDT, ug/kg dw	3200U	50000U
Endrin ketone, ug/kg dw	3200U	50000U
Methoxychlor, ug/kg dw	16000U	250000U
alpha-Chlordane, ug/kg dw	16000U	250000U
gamma-Chlordane, ug/kg dw	16000U	250000U
Toxaphene, ug/kg dw	3200U	500000U
Aroclor-1016, ug/kg dw	16000U	250000U
Aroclor-1221, ug/kg dw	16000U	250000U

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LOG NO: S1-37055

Received: 25 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS03/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED	SDG#
37055-1	PI-B2 (0-2')	10-24-91	GMS03
37055-2	PJ-B2 ((0-1.5')	10-24-91	

PARAMETER	37055-1	37055-2
Aroclor-1232, ug/kg dw	16000U	250000U
Aroclor-1242, ug/kg dw	16000U	250000U
Aroclor-1248, ug/kg dw	12000J	93000J
Aroclor-1254, ug/kg dw	18000J	110000J
Aroclor-1260, ug/kg dw	23000J	98000J
Date Extracted	11.01.91	11.01.91
Date Analyzed	12.10.91	12.10.91

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LOG NO: S1-37055

Received: 25 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS03/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED	SDG#
37055-1	PI-B2 (0-2')	10-24-91	GMS03
37055-2	PJ-B2 ((0-1.5')	10-24-91	

PARAMETER	37055-1	37055-2
Metals (6010)		
Aluminum, mg/kg dw	15400*	5640*
Antimony, mg/kg dw	19.0UN	44.0N
Barium, mg/kg dw	1890N*	9510N*
Beryllium, mg/kg dw	1.9U	3.0U
Cadmium, mg/kg dw	71.8N	82.7N
Calcium, mg/kg dw	7760	23600
Chromium, mg/kg dw	100N	125N
Cobalt, mg/kg dw	17.2B	26.8B
Copper, mg/kg dw	4070*	30100*
Iron, mg/kg dw	31700	54900
Magnesium, mg/kg dw	4040	2860B
Manganese, mg/kg dw	128	240
Nickel, mg/kg dw	548N*	2670N*
Potassium, mg/kg dw	2420	595U
Silver, mg/kg dw	4.2N	50.4N
Sodium , mg/kg dw	215B	452B
Vanadium, mg/kg dw	44.1	58.9
Zinc, mg/kg dw	9950	4500
Date Analyzed	11.20.91	11.20.91
Mercury (7471)		
Mercury , mg/kg dw	0.25	0.14
Date Analyzed	11.12.91	11.12.91

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LOG NO: S1-37055

Received: 25 OCT 91

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125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS03/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED	SDG#
37055-1	PI-B2 (0-2')	10-24-91	GMS03
37055-2	PJ-B2 ((0-1.5')	10-24-91	

PARAMETER	37055-1	37055-2
Lead (7421)		
Lead, mg/kg dw	1360	1820
Date Analyzed	12.03.91	11.29.91
Selenium (7740)		
Selenium, mg/kg dw	3.9+N	6.0UWN
Date Analyzed	11.17.91	12.06.91
Arsenic (7060)		
Arsenic, mg/kg dw	89.5S	70.5+
Date Analyzed	12.04.91	12.04.91
Thallium (7841)		
Thallium, mg/kg dw	19.7UWN	30.6UWN
Date Analyzed	11.27.91	11.27.91
Cyanide (9010A)		
Cyanide, Total, mg/kg dw	0.53N*	0.79UN*
Date Analyzed	11.04-07	11.04-07
Percent Solids, %	50	32

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Received: 25 OCT 91

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Plainview, NY 11803

Project: SDG#GMS03/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
37055-3	PI-B1 ((3-5')	10-24-91
37055-4	PI-B3 (1.5-3')	10-24-91
37055-5	PJ-B1 (3-5')	10-24-91
37055-6	PJ-B2 (1.5-3')	10-24-91

PARAMETER	37055-3	37055-4	37055-5	37055-6
Pesticides (8080)				
Aroclor-1016, ug/kg dw	110U	330U	120U	120U
Aroclor-1221, ug/kg dw	110U	330U	120U	120U
Aroclor-1232, ug/kg dw	110U	330U	120U	120U
Aroclor-1242, ug/kg dw	110U	330U	120U	120U
Aroclor-1248, ug/kg dw	390	330	120U	230
Aroclor-1254, ug/kg dw	230X	680X	230U	350X
Aroclor-1260, ug/kg dw	210J	370J	230U	200J
Date Extracted	11.01.91	11.01.91	11.01.91	11.01.91
Date Analyzed	12.03.91	12.04.91	12.04.91	12.04.91

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LOG NO: S1-37266A

Received: 06 NOV 91

Purchase Order: LTO#06490

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: NY60505-Monsanto/Dead Cr
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
37266A-7	LCS Control Limit
37266A-8	LCS % RPD
37266A-9	% RPD Control Limit
37266A-10	Control Limits Source

PARAMETER	37266A-7	37266A-8	37266A-9	37266A-10
Ignitability - Flash Point				
Ignitability-flash point, Degrees F	98-102 %	0 %	<20 %	SL
Sulfide (9030)				
Sulfide (9030)	60-140 %	14 %	<40 %	SL
Cyanide (9010)				
Cyanide, Total	75-125 %	3.8 %	<30 %	SL

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D119

LOG NO: S1-37266A

Received: 06 NOV 91

Purchase Order: LTO#06490

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: NY60505-Monsanto/Dead Cr
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
37266A-11	M1, M2, M3	11-05-91

PARAMETER	37266A-11
Volatiles in ZHE TCLP Extract (8240)	
Benzene (TCLP), mg/l	<0.020
Carbon tetrachloride (TCLP), mg/l	<0.020
Chlorobenzene (TCLP), mg/l	.076(.063)
Chloroform (TCLP), mg/l	<0.020
1,2-Dichloroethane (TCLP), mg/l	<0.020
1,1-Dichloroethylene (TCLP), mg/l	<0.020
Methyl ethyl ketone (TCLP), mg/l	<0.40
Tetrachloroethylene (TCLP), mg/l	<0.020
Trichloroethylene (TCLP), mg/l	<0.020
Vinyl chloride (TCLP), mg/l	<0.040
Surrogate - Toluene-d	108 %
Surrogate - 4-Bromofluorobenzene	115 %
Surrogate - 1,2-Dichloroethane-d4	112 %
TCLP (1311) Sec. 7.2 Extraction Date	11.12.91
Date Analyzed	11.15.91

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SL SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

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LOG NO: S1-37266A

Received: 06 NOV 91

Purchase Order: LTO#06490

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: NY60505-Monsanto/Dead Cr
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
37266A-11	M1, M2, M3	11-05-91

PARAMETER	37266A-11
Semivolatiles in TCLP Extract (8270)	
Cresol (ortho) - TCLP, mg/l	<0.050
Cresol m & p - TCLP, mg/l	<0.050
1,4-Dichlorobenzene (TCLP), mg/l	<0.050
2,4-Dinitrotoluene (TCLP), mg/l	<0.050
Hexachlorobenzene (TCLP), mg/l	<0.050
Hexachlorobutadiene (TCLP), mg/l	<0.050
Hexachloroethane (TCLP), mg/l	<0.050
Nitrobenzene (TCLP), mg/l	<0.050
Pentachlorophenol (TCLP), mg/l	<0.25
2,4,5-Trichlorophenol (TCLP), mg/l	<0.25
2,4,6-Trichlorophenol (TCLP), mg/l	<0.050
Pyridine (TCLP), mg/l	<0.25
Surrogate-2FP	33 %
Surrogate-PLH	23 %
Surrogate-NBZ	64 %
Surrogate-2FBP	79 %
Surrogate-TBP	57 %
Surrogate-TPH	88 %
Extraction Date (Extract)	11.11.91
Date Analyzed	11.12.91

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D117

LOG NO: S1-37266A

Received: 06 NOV 91

Purchase Order: LTO#06490

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: NY60505-Monsanto/Dead Cr
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
37266A-11	M1, M2, M3	11-05-91

PARAMETER	37266A-11
Herbicides in TCLP Extract (8150)	
2,4-D (TCLP), mg/l	<0.050
2,4,5-TP Silvex (TCLP), mg/l	<0.01
Surrogate-DCAA (CL 20-160)	49 %
Extraction Date (Extract)	11.11.91
Date Analyzed	11.12.91
Pesticides in TCLP Extract (8080)	
Chlordane (TCLP), mg/l	<0.0050
Endrin (TCLP), mg/l	<0.0010
Heptachlor (TCLP), mg/l	<0.00050
Heptachlor epoxide (TCLP), mg/l	<0.00050
Lindane (g-BHC) (TCLP), mg/l	<0.00050
Methoxychlor (TCLP), mg/l	<0.025
Toxaphene (TCLP), mg/l	<0.050
Surrogate-DBC	81 %
Surrogate-TCX (CL 60-150)	71 %
TCLP (1311) Sec. 7.2 Extraction Date	11.06.91
Extraction Date (Extract)	11.11.91
Date Analyzed	11.12.91

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LOG NO: S1-37266A

Received: 06 NOV 91

Purchase Order: LTO#06490

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: NY60505-Monsanto/Dead Cr
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
37266A-11	M1, M2, M3	11-05-91

PARAMETER	37266A-11
Metals in TCLP Extract (6010)	
Arsenic (TCLP), mg/l	<0.20
Barium (TCLP), mg/l	3.7(3.5)
Cadmium (TCLP), mg/l	.037(.031)
Chromium (TCLP), mg/l	<0.050
Lead (TCLP), mg/l	0.52(0.44)
Selenium (TCLP), mg/l	<0.50
Silver (TCLP), mg/l	<0.010
TCLP (1311) Sec. 7.2 Extraction Date	11.06.91
Date Analyzed	11.13.91
Mercury (TCLP) (7470)	
Mercury (TCLP) , mg/l	<0.020
TCLP (1311) Sec. 7.2 Extraction Date	11.06.91
Date Analyzed	11.14.91

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D115

LOG NO: S1-37266A

Received: 06 NOV 91

Purchase Order: LTO#06490

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: NY60505-Monsanto/Dead Cr
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
37266A-12	Matrix Spike (M1, M2, M3) (% Recovery)

PARAMETER	37266A-12
Volatiles in ZHE TCLP Extract (8240)	
Benzene (TCLP)	116 %
Carbon tetrachloride (TCLP)	128 %
Chlorobenzene (TCLP)	83 %
Chloroform (TCLP)	113 %
1,2-Dichloroethane (TCLP)	136 %
1,1-Dichloroethylene (TCLP)	118 %
Methyl ethyl ketone (TCLP)	113 %
Tetrachloroethylene (TCLP)	122 %
Trichloroethylene (TCLP)	122 %
Vinyl chloride (TCLP)	74 %
Surrogate - Toluene-d	109 %
Surrogate - 4-Bromofluorobenzene	115 %
Surrogate - 1,2-Dichloroethane-d4	113 %
TCLP (1311) Sec. 7.2 Extraction Date	11.12.91
Date Analyzed	11.15.91

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SL SAVANNAH LABORATORIES
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LOG NO: S1-37266A

Received: 06 NOV 91

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Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Purchase Order: LTO#06490

Project: NY60505-Monsanto/Dead Cr
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
37266A-12	Matrix Spike (M1, M2, M3) (% Recovery)

PARAMETER	37266A-12
Semivolatiles in TCLP Extract (8270)	
Cresol (ortho) - TCLP	54 %
1,4-Dichlorobenzene (TCLP)	76 %
2,4-Dinitrotoluene (TCLP)	78 %
Hexachlorobenzene (TCLP)	62 %
Hexachlorobutadiene (TCLP)	66 %
Hexachloroethane (TCLP)	65 %
Nitrobenzene (TCLP)	75 %
Pentachlorophenol (TCLP)	49 %
2,4,6-Trichlorophenol (TCLP)	78 %
Pyridine (TCLP)	107 %
Surrogate-2FP	13 %
Surrogate-PLH	21 %
Surrogate-NBZ	50 %
Surrogate-2FBP	73 %
Surrogate-TBP	87 %
Surrogate-TPH	92 %
Extraction Date (Extract)	11.11.91
Date Analyzed	11.12.91
Herbicides in TCLP Extract (8150)	
2,4-D (TCLP)	55 %
2,4,5-TP Silvex (TCLP)	41 %
Extraction Date (Extract)	11.11.91
Date Analyzed	11.12.91

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D113

LOG NO: S1-37266A

Received: 06 NOV 91

Purchase Order: LTO#06490

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: NY60505-Monsanto/Dead Cr
Sampled By: Client

REPORT OF RESULTS

LOG NO SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID

37266A-12 Matrix Spike (M1, M2, M3) (% Recovery)

PARAMETER	37266A-12
Pesticides in TCLP Extract (8080)	
Endrin (TCLP)	95 %
Heptachlor (TCLP)	86 %
Heptachlor epoxide (TCLP)	76 %
Lindane (g-BHC) (TCLP)	94 %
Methoxychlor (TCLP)	83 %
Surrogate-DBC	91 %
% R Surrogate-TCX (CL 60-150)	77 %
TCLP (1311) Sec. 7.2 Extraction Date	11.06.91
Extraction Date (Extract)	11.11.91
Date Analyzed	11.12.91
Metals in TCLP Extract (6010)	
Arsenic (TCLP)	89 %
Barium (TCLP)	93 %
Cadmium (TCLP)	84 %
Chromium (TCLP)	82 %
Lead (TCLP)	84 %
Selenium (TCLP)	92 %
Silver (TCLP)	67 %
TCLP (1311) Sec. 7.2 Extraction Date	11.06.91
Date Analyzed	11.13.91
Mercury (TCLP) (7470)	
Mercury (TCLP)	92 %
TCLP (1311) Sec. 7.2 Extraction Date	11.06.91
Date Analyzed	11.14.91

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SL SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

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LOG NO: S1-37266A

Received: 06 NOV 91

Purchase Order: LTO#06490

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: NY60505-Monsanto/Dead Cr
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
37266A-13	Extract Fluid Method Blank (mg/l)

PARAMETER	37266A-13
Volatiles in ZHE TCLP Extract (8240)	
Benzene (TCLP), mg/l	<0.020
Carbon tetrachloride (TCLP), mg/l	<0.020
Chlorobenzene (TCLP), mg/l	<0.020
Chloroform (TCLP), mg/l	<0.020
1,2-Dichloroethane (TCLP), mg/l	<0.020
1,1-Dichloroethylene (TCLP), mg/l	<0.020
Methyl ethyl ketone (TCLP), mg/l	<0.40
Tetrachloroethylene (TCLP), mg/l	<0.020
Trichloroethylene (TCLP), mg/l	<0.020
Vinyl chloride (TCLP), mg/l	<0.040
Surrogate - Toluene-d	109 %
Surrogate - 4-Bromofluorobenzene	114 %
Surrogate - 1,2-Dichloroethane-d4	111 %
TCLP (1311) Sec. 7.2 Extraction Date	11.12.91
Date Analyzed	11.15.91

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D111

LOG NO: S1-37266A

Received: 06 NOV 91

Purchase Order: LTO#06490

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: NY60505-Monsanto/Dead Cr
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
37266A-13	Extract Fluid Method Blank (mg/l)

PARAMETER	37266A-13
Semivolatiles in TCLP Extract (8270)	
Cresol (ortho) - TCLP, mg/l	<0.050
Cresol m & p - TCLP, mg/l	<0.050
1,4-Dichlorobenzene (TCLP), mg/l	<0.050
2,4-Dinitrotoluene (TCLP), mg/l	<0.050
Hexachlorobenzene (TCLP), mg/l	<0.050
Hexachlorobutadiene (TCLP), mg/l	<0.050
Hexachloroethane (TCLP), mg/l	<0.050
Nitrobenzene (TCLP), mg/l	<0.050
Pentachlorophenol (TCLP), mg/l	<0.25
2,4,5-Trichlorophenol (TCLP), mg/l	<0.25
2,4,6-Trichlorophenol (TCLP), mg/l	<0.050
Pyridine (TCLP), mg/l	<0.25
Surrogate-2FP	22 %
Surrogate-PLH	34 %
Surrogate-NBZ	58 %
Surrogate-2FBP	69 %
Surrogate-TBP	85 %
Surrogate-TPH	108 %
Extraction Date (Extract)	11.11.91
Date Analyzed	11.12.91

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LOG NO: S1-37266A

Received: 06 NOV 91

Purchase Order: LTO#06490

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: NY60505-Monsanto/Dead Cr
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
37266A-13	Extract Fluid Method Blank (mg/l)

PARAMETER	37266A-13
Herbicides in TCLP Extract (8150)	
2,4-D (TCLP), mg/l	<0.050
2,4,5-TP Silvex (TCLP), mg/l	<0.010
Surrogate-DCAA (CL 20-160)	57 %
Extraction Date (Extract)	11.11.91
Date Analyzed	11.12.91
Pesticides in TCLP Extract (8080)	
Chlordane (TCLP), mg/l	<0.0050
Endrin (TCLP), mg/l	<0.0010
Heptachlor (TCLP), mg/l	<0.00050
Heptachlor epoxide (TCLP), mg/l	<0.00050
Lindane (g-BHC) (TCLP), mg/l	<0.00050
Methoxychlor (TCLP), mg/l	<0.025
Toxaphene (TCLP), mg/l	<0.050
Surrogate-DBC	96 %
% R Surrogate-TCX (CL 60-150)	81 %
TCLP (1311) Sec. 7.2 Extraction Date	11.06.91
Extraction Date (Extract)	11.11.91
Date Analyzed	11.12.91

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D109

LOG NO: S1-37266A

Received: 06 NOV 91

Purchase Order: LTO#06490

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: NY60505-Monsanto/Dead Cr
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
37266A-13	Extract Fluid Method Blank (mg/l)

PARAMETER	37266A-13
Metals in TCLP Extract (6010)	
Arsenic (TCLP), mg/l	<0.20
Barium (TCLP), mg/l	<1.0
Cadmium (TCLP), mg/l	<0.010
Chromium (TCLP), mg/l	<0.050
Lead (TCLP), mg/l	<0.20
Selenium (TCLP), mg/l	<0.50
Silver (TCLP), mg/l	<0.010
TCLP (1311) Sec. 7.2 Extraction Date	11.06.91
Date Analyzed	11.13.91
Mercury (TCLP) (7470)	
Mercury (TCLP) , mg/l	<0.020
TCLP (1311) Sec. 7.2 Extraction Date	11.06.91
Date Analyzed	11.14.91

Methods SW-846-1311 - TCLP results which are above the quantitation limit have been corrected for analytical bias per instructions in Section 8.2.5 of Method 1311 (Federal Register, June 29, 1990). The first number reported is the corrected TCLP value (used to determine if the sample is hazardous) and the value in parenthesis ( ) is the uncorrected analytical result.

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LOG NO: S1-37266

Received: 06 NOV 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS04/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
37266-6	Method Blank-Soil
37266-7	% RPD for MS/MSD

ARAMETER	37266-6	37266-7
Hexachlorobutadiene, ug/kg dw	330U	---
4-Chloro-3-methylphenol, ug/kg dw	330U	20 %
2-Methylnaphthalene, ug/kg dw	330U	---
Hexachlorocyclopentadiene, ug/kg dw	330U	---
2,4,6-Trichlorophenol, ug/kg dw	330U	---
2,4,5-Trichlorophenol, ug/kg dw	1700U	---
2-Chloronaphthalene, ug/kg dw	330U	---
2-Nitroaniline, ug/kg dw	1700U	---
Dimethylphthalate, ug/kg dw	330U	---
Acenaphthylene, ug/kg dw	330U	---
Acenaphthene, ug/kg dw	330U	1 %
2,4-Dinitrophenol, ug/kg dw	1700U	---
4-Nitrophenol, ug/kg dw	1700U	31 %
Dibenzofuran, ug/kg dw	330U	---
,4-Dinitrotoluene, ug/kg dw	330U	1 %
2,6-Dinitrotoluene, ug/kg dw	330U	---
Diethylphthalate, ug/kg dw	330U	---
4-Chlorophenyl-phenyl ether, ug/kg dw	330U	---
Fluorene, ug/kg dw	330U	---
4-Nitroaniline, ug/kg dw	1700U	---
4,6-Dinitro-2-methylphenol, ug/kg dw	1700U	---
N-Nitrosodiphenylamine/Diphenylamine, ug/kg dw	330U	---
4-Bromophenyl-phenyl-ether, ug/kg dw	330U	---

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LOG NO: S1-37266

Received: 06 NOV 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS04/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
37266-6	Method Blank-Soil
37266-7	, RPD for MS/MSD

PARAMETER	37266-6	37266-7
Semivolatiles (8270)		
Phenol, ug/kg dw	330U	3 %
bis(2-Chloroethyl) ether, ug/kg dw	330U	---
2-Chlorophenol, ug/kg dw	330U	3 %
1,3-Dichlorobenzene, ug/kg dw	330U	---
1,4-Dichlorobenzene, ug/kg dw	330U	---
Benzyl alcohol, ug/kg dw	330U	---
1,2-Dichlorobenzene, ug/kg dw	330U	---
2-Methylphenol (o-cresol), ug/kg dw	330U	---
Bis(2-chloroisopropyl)ether, ug/kg dw	330U	---
4-Methylphenol (p-cresol), ug/kg dw	330U	---
N-Nitroso-di-n-propylamine, ug/kg dw	330U	6 %
Hexachloroethane, ug/kg dw	330U	---
Nitrobenzene, ug/kg dw	330U	---
Isophorone, ug/kg dw	330U	---
2-Nitrophenol, ug/kg dw	330U	---
2,4-Dimethylphenol, ug/kg dw	330U	---
Benzoic acid, ug/kg dw	1700U	---
bis(2-Chloroethoxy) methane, ug/kg dw	330U	---
2,4-Dichlorophenol, ug/kg dw	330U	---
1,2,4-Trichlorobenzene, ug/kg dw	330U	17 %
Naphthalene, ug/kg dw	330U	---
4-Chloroaniline, ug/kg dw	330U	---

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LOG NO: S1-37266

Received: 06 NOV 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS04/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
37266-6	Method Blank-Soil
37266-7	% RPD for MS/MSD

PARAMETER	37266-6	37266-7
1,1,2-Trichloroethane, ug/kg dw	630U	---
Benzene, ug/kg dw	630U	5.0 %
Cis-1,3-Dichloropropene, ug/kg dw	630U	---
Bromoform, ug/kg dw	630U	---
2-Hexanone, ug/kg dw	1300U	---
4-Methyl-2-pentanone, ug/kg dw	1300U	---
Tetrachloroethene, ug/kg dw	630U	---
Toluene, ug/kg dw	630U	1.0 %
Chlorobenzene, ug/kg dw	150J/630U	6.0 %
Ethylbenzene, ug/kg dw	630U	---
Styrene, ug/kg dw	630U	---
Xylenes, ug/kg dw	630U	---
Cis-1,2-Dichloroethene, ug/kg dw	630U	---
Date Analyzed	11.14-18	---

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LOG NO: S1-37266

Received: 06 NOV 91

Mr. Brian Blum
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125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS04/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
37266-6	Method Blank-Soil
37266-7	% RPD for MS/MSD

PARAMETER	37266-6	37266-7
Volatiles by GC/MS (8240)		
Chloromethane, ug/kg dw	1300U	---
Bromomethane, ug/kg dw	1300U	---
Vinyl Chloride, ug/kg dw	1300U	---
Chloroethane, ug/kg dw	1300U	---
Methylene Chloride, ug/kg dw	630U	---
Acetone, ug/kg dw	1300U	---
Carbon Disulfide, ug/kg dw	630U	---
1,1-Dichloroethene, ug/kg dw	630U	20 %
1,1-Dichloroethane, ug/kg dw	630U	---
cis/trans-1,2-Dichloroethylene, ug/kg dw	630U	---
Chloroform, ug/kg dw	630U	---
1,2-Dichloroethane, ug/kg dw	630U	---
2-Butanone, ug/kg dw	1300U	---
1,1,1-Trichloroethane, ug/kg dw	630U	---
Carbon Tetrachloride, ug/kg dw	630U	---
Vinyl Acetate, ug/kg dw	1300U	---
Bromodichloromethane, ug/kg dw	630U	---
1,1,2,2-Tetrachloroethane, ug/kg dw	630U	---
1,2-Dichloropropane, ug/kg dw	630U	---
Trans-1,3-Dichloropropene, ug/kg dw	630U	---
Trichloroethene, ug/kg dw	630U	2.0 %
Dibromochloromethane, ug/kg dw	630U	---

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LOG NO: S1-37266

Received: 06 NOV 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS04/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
37266-4	Matrix Spike (M3 0-8') (% Recovery)
37266-5	Matrix Spike Dup (M3 0-8') (% Recovery

PARAMETER	37266-4	37266-5
Arsenic (7060)		
Arsenic	60 %	89 %
Thallium (7841)		
Thallium	75 %	82 %
Cyanide (9010A)		
Cyanide, Total	59 %	59 %

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D103

LOG NO: S1-37266

Received: 06 NOV 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS04/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
37266-4	Matrix Spike (M3 0-8') (% Recovery)
37266-5	Matrix Spike Dup (M3 0-8') (% Recovery

PARAMETER	37266-4	37266-5
Metals (6010)		
Aluminum	---	---
Antimony	65 %	71 %
Barium	---	---
Beryllium	88 %	89 %
Cadmium	96 %	89 %
Calcium	---	---
Chromium	113 %	76 %
Cobalt	96 %	94 %
Copper	---	---
Iron	---	---
Magnesium	---	---
Manganese	90 %	89 %
Nickel	---	---
Potassium	---	---
Silver	110 %	88 %
Sodium	---	---
Vanadium	103 %	100 %
Zinc	---	---
Mercury (7471)		
Mercury	81 %	41 %
Lead (7421)		
Lead	---	---
Selenium (7740)		
Selenium	122 %	108 %

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D102

LOG NO: S1-37266

Received: 06 NOV 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS04/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
37266-4	Matrix Spike (M3 0-8') (% Recovery)
37266-5	Matrix Spike Dup (M3 0-8') (% Recovery

PARAMETER	37266-4	37266-5
Volatiles by GC/MS (8240)		
1,1-Dichloroethene	113 %	110 %
Trichloroethene	98 %	101 %
Benzene	98 %	102 %
Toluene	98 %	99 %
Chlorobenzene	89 %	95 %
Semivolatiles (8270)		
Phenol,	96 %	93 %
2-Chlorophenol,	88 %	90 %
1,4-Dichlorobenzene,	51 %	8 %
N-Nitroso-di-n-propylamine,	81 %	86 %
1,2,4-Trichlorobenzene,	21 %	25 %
4-Chloro-3-methylphenol,	91 %	111 %
Acenaphthene,	114 %	116 %
4-Nitrophenol,	74 %	54 %
2,4-Dinitrotoluene,	72 %	73 %
Pentachlorophenol,	127 %	126 %
Pyrene,	71 %	3 %
Pesticides (8080)		---
gamma-BHC	---	---
Heptachlor	---	---
Dieldrin	---	---
Endrin	---	---
4,4'-DDT	---	---
Aldrin	---	---

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D101

LOG NO: S1-37266

Received: 06 NOV 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS04/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
37266-8	Equipment Blank	11-05-91

PARAMETER	37266-8
Mercury (7470)	
Mercury , ug/l	0.20U
Date Analyzed	11.14.91
Lead (7421)	
Lead, ug/l	3.0U
Date Analyzed	11.27.91
Selenium (7740)	
Selenium, ug/l	5.0
Date Analyzed	12.07.91
Arsenic (7060)	
Arsenic, ug/l	10.0U
Date Analyzed	12.06.91
Thallium (7481)	
Thallium, ug/l	10.0U
Date Analyzed	11.29.91
Cyanide (9010)	
Cyanide, Total, ug/l	10U
Date Analyzed	11.15.91

Methods: CLP

Janette D. Long

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LOG NO: S1-37266

Received: 06 NOV 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS04/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
37266-8	Equipment Blank	11-05-91

RAMETER	37266-8
Aroclor-1242, ug/l	0.50U
Aroclor-1248, ug/l	0.50U
Aroclor-1254, ug/l	1.0U
Aroclor-1260, ug/l	1.0U
Date Extracted	11.12.91
Date Analyzed	12.05.91
Metals (6010)	
Aluminum, mg/l	200U
Antimony, mg/l	50.0U
Barium, mg/l	10.0U
Beryllium, mg/l	5.0U
Cadmium, mg/l	5.0U
Calcium, mg/l	395B
Chromium, mg/l	10.0U
Cobalt, mg/l	10.0U
Copper, mg/l	81.4
Iron, mg/l	50.0U
Magnesium, mg/l	50.0U
Manganese, mg/l	10.0U
Nickel, mg/l	40.0U
Potassium, mg/l	1000U
Silver, mg/l	10.0U
Sodium , mg/l	500U
Vanadium, mg/l	10.0U
Zinc, mg/l	20.0U
Date Analyzed	11.26.91

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D99

LOG NO: S1-37266

Received: 06 NOV 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS04/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
37266-8	Equipment Blank	11-05-91

PARAMETER	37266-8
Pesticides (8080)	
alpha-BHC, ug/l	0.050U
beta-BHC, ug/l	0.050U
delta-BHC, ug/l	0.050U
gamma-BHC, ug/l	0.050U
Heptachlor, ug/l	0.050U
Aldrin, ug/l	0.050U
Heptachlor epoxide, ug/l	0.050U
Endosulfan I, ug/l	0.050U
Dieldrin, ug/l	0.10U
4,4'-DDE, ug/l	0.10U
Endrin, ug/l	0.10U
Endosulfan II, ug/l	0.10U
4,4'-DDD, ug/l	0.10U
Endosulfan sulfate, ug/l	0.10U
4,4'-DDT, ug/l	0.10U
Endrin ketone, ug/l	0.10U
Methoxychlor, ug/l	0.50U
alpha-Chlordane, ug/l	0.50U
gamma-Chlordane, ug/l	0.50U
Toxaphene, ug/l	1.0U
Aroclor-1016, ug/l	0.50U
Aroclor-1221, ug/l	0.50U
Aroclor-1232, ug/l	0.50U

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LOG NO: S1-37266

Received: 06 NOV 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS04/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
37266-8	Equipment Blank	11-05-91

RAMETER	37266-8
Pentachlorophenol, ug/l	50U
Phenanthrene, ug/l	10U
Anthracene, ug/l	10U
Di-n-butylphthalate, ug/l	10U
Fluoranthene, ug/l	10U
Pyrene, ug/l	10U
Butylbenzylphthalate, ug/l	0.2J
3,3'-Dichlorobenzidine, ug/l	20U
Benzo(a)anthracene, ug/l	10U
bis(2-Ethylhexyl) phthalate, ug/l	10U
Chrysene, ug/l	10U
Di-n-octylphthalate, ug/l	10U
Benzo(b)fluoranthene, ug/l	10U
Benzo(k)fluoranthene, ug/l	10U
enzo(a)pyrene, ug/l	10U
indeno (1,2,3-cd)pyrene, ug/l	10U
Dibenzo(a,h)anthracene, ug/l	10U
Benzo(g,h,i)perylene, ug/l	10U
Date Extracted	11.06.91
Date Analyzed	11.16.91

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D97

LOG NO: S1-37266

Received: 06 NOV 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS04/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
37266-8	Equipment Blank	11-05-91

PARAMETER	37266-8
4-Chloro-3-methylphenol, ug/l	10U
2-Methylnaphthalene, ug/l	10U
Hexachlorocyclopentadiene, ug/l	10U
2,4,6-Trichlorophenol, ug/l	10U
2,4,5-Trichlorophenol, ug/l	50U
2-Chloronaphthalene, ug/l	10U
2-Nitroaniline, ug/l	50U
Dimethylphthalate, ug/l	10U
Acenaphthylene, ug/l	10U
3-Nitroaniline, ug/l	50U
Acenaphthene, ug/l	10U
2,4-Dinitrophenol, ug/l	50U
4-Nitrophenol, ug/l	50U
Dibenzofuran, ug/l	10U
2,4-Dinitrotoluene, ug/l	10U
2,6-Dinitrotoluene, ug/l	10U
Diethylphthalate, ug/l	10U
4-Chlorophenyl-phenyl ether, ug/l	10U
Fluorene, ug/l	10U
4-Nitroaniline, ug/l	50U
4,6-Dinitro-2-methylphenol, ug/l	50U
N-Nitrosodiphenylamine/Diphenylamine, ug/l	10U
4-Bromophenyl-phenyl-ether, ug/l	10U
Hexachlorobenzene, ug/l	10U

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5102 LaRoche Avenue • Savannah, GA 31404 • (912) 354-7858 • Fax (912) 352-0165

D96

LOG NO: S1-37266

Received: 06 NOV 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS04/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
37266-8	Equipment Blank	11-05-91

ARAMETER	37266-8
Semivolatiles (8270)	
Phenol, ug/l	10U
bis(2-Chloroethyl) ether, ug/l	10U
2-Chlorophenol, ug/l	10U
1,3-Dichlorobenzene, ug/l	10U
1,4-Dichlorobenzene, ug/l	10U
Benzyl alcohol, ug/l	10U
1,2-Dichlorobenzene, ug/l	10U
2-Methylphenol (o-cresol), ug/l	10U
Bis(2-chloroisopropyl)ether, ug/l	10U
4-Methylphenol (p-cresol), ug/l	10U
N-Nitroso-di-n-propylamine, ug/l	10U
Hexachloroethane, ug/l	10U
Nitrobenzene, ug/l	10U
Isophorone, ug/l	10U
2-Nitrophenol, ug/l	10U
2,4-Dimethylphenol, ug/l	10U
Benzoic acid, ug/l	50U
bis(2-Chloroethoxy) methane, ug/l	10U
2,4-Dichlorophenol, ug/l	10U
1,2,4-Trichlorobenzene, ug/l	10U
Naphthalene, ug/l	10U
4-Chloroaniline, ug/l	10U
Hexachlorobutadiene, ug/l	10U

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LOG NO: S1-37266

Received: 06 NOV 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS04/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
37266-8	Equipment Blank	11-05-91

PARAMETER	37266-8
Benzene, ug/l	5.0U
Cis-1,3-Dichloropropene, ug/l	5.0U
Bromoform, ug/l	5.0U
2-Hexanone, ug/l	50U
4-Methyl-2-pentanone, ug/l	50U
Tetrachloroethene, ug/l	5.0U
Toluene, ug/l	5.0U
Chlorobenzene, ug/l	5.0U
Ethylbenzene, ug/l	5.0U
Styrene, ug/l	5.0U
Xylenes, ug/l	5.0U
Cis-1,2-Dichloroethene, ug/l	5.0U
1,1,2-Trichloro-1,2,2-trifluoroethane, ug/l	5.0U
Date Analyzed	11.15.91

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Project: SDG#GMS04/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
37266-8	Equipment Blank	11-05-91

PARAMETER	37266-8
Volatiles by GC/MS (8240)	
Chloromethane, ug/l	10U
Bromomethane, ug/l	10U
Vinyl Chloride, ug/l	10U
Chloroethane, ug/l	10U
Methylene Chloride, ug/l	5.0U
Acetone, ug/l	100U
Carbon Disulfide, ug/l	5.0U
1,1-Dichloroethene, ug/l	5.0U
1,1-Dichloroethane, ug/l	5.0U
cis/trans-1,2-Dichloroethylene, ug/l	5.0U
Chloroform, ug/l	5.0U
1,2-Dichloroethane, ug/l	5.0U
2-Butanone, ug/l	100U
1,1,1-Trichloroethane, ug/l	5.0U
Carbon Tetrachloride, ug/l	5.0U
Vinyl Acetate, ug/l	50U
Bromodichloromethane, ug/l	5.0U
1,1,2,2-Tetrachloroethane, ug/l	5.0U
1,2-Dichloropropane, ug/l	5.0U
Trans-1,3-Dichloropropene, ug/l	5.0U
Trichloroethene, ug/l	5.0U
Dibromochloromethane, ug/l	5.0U
1,1,2-Trichloroethane, ug/l	5.0U

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LOG NO: S1-37266

Received: 06 NOV 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS04/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
37266-3	M3 (0-8')	11-05-91

PARAMETER	37266-3
Mercury (7471)	
Mercury , mg/kg dw	0.45N
Date Analyzed	11.21.91
Lead (7421)	
Lead, mg/kg dw	1910
Date Analyzed	12.03.91
Selenium (7740)	
Selenium, mg/kg dw	3.2UW
Date Analyzed	12.07.91
Arsenic (7060)	
Arsenic, mg/kg dw	94.0N
Date Analyzed	12.06.91
Thallium (7841)	
Thallium, mg/kg dw	6.7UW
Date Analyzed	11.29.91
Percent Solids, %	28
Cyanide (9010A)	
Cyanide, Total, mg/kg dw	1.3N
Date Analyzed	11.16.91

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LOG NO: S1-37266

Received: 06 NOV 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS04/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
37266-3	M3 (0-8')	11-05-91

PARAMETER	37266-3
Aroclor-1242, ug/kg dw	110000U
Aroclor-1248, ug/kg dw	210000
Aroclor-1254, ug/kg dw	81000J
Aroclor-1260, ug/kg dw	72000J
Date Extracted	11.12.91
Date Analyzed	12.10.91
Metals (6010)	
Aluminum, mg/kg dw	7290
Antimony, mg/kg dw	41.2N
Barium, mg/kg dw	9060
Beryllium, mg/kg dw	3.4U
Cadmium, mg/kg dw	47.2
Calcium, mg/kg dw	12500
Chromium, mg/kg dw	183
Cobalt, mg/kg dw	20.6B
Copper, mg/kg dw	21000
Iron, mg/kg dw	48500
Magnesium, mg/kg dw	4340
Manganese, mg/kg dw	178
Nickel, mg/kg dw	2490
Potassium, mg/kg dw	989B
Silver, mg/kg dw	26.0
Sodium , mg/kg dw	338U
Vanadium, mg/kg dw	37.7
Zinc, mg/kg dw	31600*
Date Analyzed	11.26.91

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D91

LOG NO: S1-37266

Received: 06 NOV 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS04/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
37266-3	M3 (0-8')	11-05-91

PARAMETER	37266-3
Pesticides (8080)	
alpha-BHC, ug/kg dw	11000U
beta-BHC, ug/kg dw	11000U
delta-BHC, ug/kg dw	11000U
gamma-BHC, ug/kg dw	11000U
Heptachlor, ug/kg dw	11000U
Aldrin, ug/kg dw	11000U
Heptachlor epoxide, ug/kg dw	11000U
Endosulfan I, ug/kg dw	11000U
Dieldrin, ug/kg dw	23000U
4,4'-DDE, ug/kg dw	23000U
Endrin, ug/kg dw	23000U
Endosulfan II, ug/kg dw	23000U
4,4'-DDD, ug/kg dw	23000U
Endosulfan sulfate, ug/kg dw	23000U
4,4'-DDT, ug/kg dw	23000U
Endrin ketone, ug/kg dw	23000U
Methoxychlor, ug/kg dw	110000U
alpha-Chlordane, ug/kg dw	110000U
gamma-Chlordane, ug/kg dw	110000U
Toxaphene, ug/kg dw	230000U
Aroclor-1016, ug/kg dw	110000U
Aroclor-1221, ug/kg dw	110000U
Aroclor-1232, ug/kg dw	110000U

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LOG NO: S1-37266

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Plainview, NY 11803

Project: SDG#GMS04/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
37266-3	M3 (0-8')	11-05-91

PARAMETER	37266-3
Phenanthrene, ug/kg dw	11000J
Anthracene, ug/kg dw	2500J
Di-n-butylphthalate, ug/kg dw	12000U
Fluoranthene, ug/kg dw	21000
Pyrene, ug/kg dw	23000
Butylbenzylphthalate, ug/kg dw	12000U
3,3'-Dichlorobenzidine, ug/kg dw	24000U
Benzo(a)anthracene, ug/kg dw	9400J
bis(2-Ethylhexyl) phthalate, ug/kg dw	18000B
Chrysene, ug/kg dw	12000
Di-n-octylphthalate, ug/kg dw	12000U
Benzo(b)fluoranthene, ug/kg dw	15000
Benzo(k)fluoranthene, ug/kg dw	9300J
Benzo(a)pyrene, ug/kg dw	7500J
Indeno (1,2,3-cd)pyrene, ug/kg dw	3700J
Dibenzo(a,h)anthracene, ug/kg dw	1200J
Benzo(g,h,i)perylene, ug/kg dw	6000J
1,3-Dichlorobenzene, ug/kg dw	4100J
Date Extracted	11.06.91
Date Analyzed	11.16.91

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LOG NO: S1-37266

Received: 06 NOV 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS04/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
37266-3	M3 (0-8')	11-05-91

PARAMETER	37266-3
2-Methylnaphthalene, ug/kg dw	6900J
Hexachlorocyclopentadiene, ug/kg dw	12000U
2,4,6-Trichlorophenol, ug/kg dw	12000U
2,4,5-Trichlorophenol, ug/kg dw	59000U
2-Chloronaphthalene, ug/kg dw	12000U
2-Nitroaniline, ug/kg dw	59000U
Dimethylphthalate, ug/kg dw	12000U
Acenaphthylene, ug/kg dw	12000U
3-Nitroaniline, ug/kg dw	59000U
Acenaphthene, ug/kg dw	12000U
2,4-Dinitrophenol, ug/kg dw	59000U
4-Nitrophenol, ug/kg dw	59000U
Dibenzofuran, ug/kg dw	12000U
2,4-Dinitrotoluene, ug/kg dw	12000U
2,6-Dinitrotoluene, ug/kg dw	12000U
Diethylphthalate, ug/kg dw	12000U
4-Chlorophenyl-phenyl ether, ug/kg dw	12000U
Fluorene, ug/kg dw	5200J
4-Nitroaniline, ug/kg dw	59000U
4,6-Dinitro-2-methylphenol, ug/kg dw	59000U
N-Nitrosodiphenylamine/Diphenylamine, ug/kg dw	12000U
4-Bromophenyl-phenyl-ether, ug/kg dw	12000U
Hexachlorobenzene, ug/kg dw	12000U
Pentachlorophenol, ug/kg dw	59000U

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Plainview, NY 11803

Project: SDG#GMS04/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
37266-3	M3 (0-8')	11-05-91

ARAMETER	37266-3
Semivolatiles (8270)	
Phenol, ug/kg dw	12000U
bis(2-Chloroethyl) ether, ug/kg dw	12000U
2-Chlorophenol, ug/kg dw	12000U
1,4-Dichlorobenzene, ug/kg dw	40000
Benzyl alcohol, ug/kg dw	12000U
1,2-Dichlorobenzene, ug/kg dw	26000
2-Methylphenol (o-cresol), ug/kg dw	12000U
Bis(2-chloroisopropyl)ether, ug/kg dw	12000U
4-Methylphenol (p-cresol), ug/kg dw	12000U
N-Nitroso-di-n-propylamine, ug/kg dw	12000U
Hexachloroethane, ug/kg dw	12000U
Nitrobenzene, ug/kg dw	12000U
Isophorone, ug/kg dw	12000U
2-Nitrophenol, ug/kg dw	12000U
2,4-Dimethylphenol, ug/kg dw	12000U
Benzoic acid, ug/kg dw	59000U
bis(2-Chloroethoxy) methane, ug/kg dw	12000U
2,4-Dichlorophenol, ug/kg dw	12000U
1,2,4-Trichlorobenzene, ug/kg dw	14000
Naphthalene, ug/kg dw	3300J
4-Chloroaniline, ug/kg dw	12000U
Hexachlorobutadiene, ug/kg dw	12000U
4-Chloro-3-methylphenol, ug/kg dw	12000U

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LOG NO: S1-37266

Received: 06 NOV 91

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Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS04/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
37266-3	M3 (0-8')	11-05-91

PARAMETER	37266-3
Benzene, ug/kg dw	2200U
Cis-1,3-Dichloropropene, ug/kg dw	2200U
Bromoform, ug/kg dw	2200U
2-Hexanone, ug/kg dw	4500U
4-Methyl-2-pentanone, ug/kg dw	4500U
Tetrachloroethene, ug/kg dw	2200U
Toluene, ug/kg dw	2200U
Chlorobenzene, ug/kg dw	10000
Ethylbenzene, ug/kg dw	820J
Styrene, ug/kg dw	2200U
Xylenes, ug/kg dw	2200U
Cis-1,2-Dichloroethene, ug/kg dw	2200U
Date Analyzed	11.18.91

SL SAVANNAH LABORATORIES
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LOG NO: S1-37266

Received: 06 NOV 91

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Plainview, NY 11803

Project: SDG#GMS04/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
37266-3	M3 (0-8')	11-05-91

\RAMETER	37266-3
Volatiles by GC/MS (8240)	
Chloromethane, ug/kg dw	4500U
Bromomethane, ug/kg dw	4500U
Vinyl Chloride, ug/kg dw	4500U
Chloroethane, ug/kg dw	4500U
Methylene Chloride, ug/kg dw	2200U
Acetone, ug/kg dw	4500U
Carbon Disulfide, ug/kg dw	2200U
1,1-Dichloroethene, ug/kg dw	2200U
1,1-Dichloroethane, ug/kg dw	2200U
cis/trans-1,2-Dichloroethylene, ug/kg dw	2200U
Chloroform, ug/kg dw	2200U
1,2-Dichloroethane, ug/kg dw	2200U
2-Butanone, ug/kg dw	4500U
1,1,1-Trichloroethane, ug/kg dw	2200U
arbon Tetrachloride, ug/kg dw	2200U
Vinyl Acetate, ug/kg dw	4500U
Bromodichloromethane, ug/kg dw	2200U
1,1,2,2-Tetrachloroethane, ug/kg dw	2200U
1,2-Dichloropropane, ug/kg dw	2200U
Trans-1,3-Dichloropropene, ug/kg dw	2200U
Trichloroethene, ug/kg dw	2200U
Dibromochloromethane, ug/kg dw	2200U
1,1,2-Trichloroethane, ug/kg dw	2200U

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LOG NO: S1-37266

Received: 06 NOV 91

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Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS04/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED	SDG#
37266-1	M1 (0-3')	11-05-91	GMS04
37266-2	M2 (0-3.5')	11-05-91	GMS04

PARAMETER	37266-1	37266-2
Lead (7421)		
Lead, mg/kg dw	625	796
Date Analyzed	12.03.91	12.03.91
Selenium (7740)		
Selenium, mg/kg dw	3.1U	1.6UW
Date Analyzed	12.07.91	12.07.91
Arsenic (7060)		
Arsenic, mg/kg dw	25.2N	7.0SN
Date Analyzed	12.06.91	12.06.91
Thallium (7841)		
Thallium, mg/kg dw	6.0UW	3.2UW
Date Analyzed	11.29.91	11.29.91
Pesticides (8080)		
Aroclor-1016, ug/kg dw	2600U	1400U
Aroclor-1221, ug/kg dw	2600U	1400U
Aroclor-1232, ug/kg dw	2600U	1400U
Aroclor-1242, ug/kg dw	2600U	1400U
Aroclor-1248, ug/kg dw	13000	6900
Aroclor-1254, ug/kg dw	8000X	4200X
Aroclor-1260, ug/kg dw	8300	3800
Date Extracted	11.12.91	11.12.91
Date Analyzed	12.04.91	12.04.91
Percent Solids, %	31	59

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LOG NO: S1-37266

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Received: 06 NOV 91

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125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS04/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED	SDG#
37266-1	M1 (0-3')	11-05-91	GMS04
37266-2	M2 (0-3.5')	11-05-91	GMS04

PARAMETER	37266-1	37266-2
Metals (6010)		
Aluminum, mg/kg dw	4670	7220
Antimony, mg/kg dw	30.8UN	16.6BN
Barium, mg/kg dw	1760	3080
Beryllium, mg/kg dw	3.1U	1.6U
Cadmium, mg/kg dw	17.2	8.6
Calcium, mg/kg dw	11500	5560
Chromium, mg/kg dw	80	89.5
Cobalt, mg/kg dw	18.8B	9.1B
Copper, mg/kg dw	8150	13400
Iron, mg/kg dw	16300	20600
Magnesium, mg/kg dw	6200	3090
Manganese, mg/kg dw	154	162
Nickel, mg/kg dw	1390	959*
Potassium, mg/kg dw	758B	1080B
Silver, mg/kg dw	18.0	19.6
Sodium , mg/kg dw	309U	211B
Vanadium, mg/kg dw	19.3B	29.3
Zinc, mg/kg dw	9930	12300*
Date Analyzed	11.26.91	11.26.91
Mercury (7471)		
Mercury , mg/kg dw	0.07N	0.38N
Date Analyzed	11.21.91	11.21.91

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LOG NO: S1-[illegible]355

Received: 25 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS03/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
37055-7	Matrix Spike (PI-B2/0-2') (% Recovery)
37055-8	Matrix Spike Dup (PI-B2/0-2) (% Recovery)

PARAMETER	37055-7	37055-8
Arsenic (7060)		
Arsenic	81 %	54 %
Thallium (7841)		
Thallium	56 %	55 %
Cyanide (9010A)		
Cyanide, Total	82 %	169 %

SL SAVANNAH LABORATORIES
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5102 LaRoche Avenue • Savannah, GA 31404 • (912) 354-7858 • Fax (912) 352-0165

LOG NO: S1-37055

Received: 25 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS03/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
37055-7	Matrix Spike (PI-B2/0-2') (% Recovery)
37055-8	Matrix Spike Dup (PI-B2/0-2) (% Recovery)

ARAMETER	37055-7	37055-8
Metals (6010)		
Aluminum	---	---
Antimony	34 %	41 %
Barium	---	---
Beryllium	97 %	92 %
Cadmium	---	---
Calcium	---	---
Chromium	191 %	222 %
Cobalt	100 %	97 %
Copper	---	---
Iron	---	---
Magnesium	---	---
Manganese	106 %	115 %
Nickel	---	---
otassium	---	---
Silver	116 %	134 %
Sodium	---	---
Vanadium	95 %	91 %
Zinc	---	---
Mercury (7471)		
Mercury	84 %	79 %
Lead (7421)		
Lead, mg/l	---	---
Selenium (7740)		
Selenium	49 %	52 %

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LOG NO: S1-37055

Received: 25 OCT 91

Mr. Brian Blum
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125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS03/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
37055-7	Matrix Spike (PI-B2/0-2') (% Recovery)
37055-8	Matrix Spike Dup (PI-B2/0-2) (% Recovery)

PARAMETER	37055-7	37055-8
Volatiles by GC/MS (8240)		
1,1-Dichloroethene	106 %	124 %
Trichloroethene	93 %	105 %
Benzene	122 %	132 %
Toluene	110 %	130 %
Chlorobenzene	176 %	240 %
Semivolatiles (8270)		
Phenol	52 %	51 %
2-Chlorophenol	54 %	52 %
1,4-Dichlorobenzene	43 %	47 %
N-Nitroso-di-n-propylamine	54 %	51 %
1,2,4-Trichlorobenzene	51 %	52 %
4-Chloro-3-methylphenol	61 %	57 %
Acenaphthene	52 %	54 %
4-Nitrophenol	29 %	28 %
2,4-Dinitrotoluene	23 %	20 %
Pentachlorophenol	19 %	17 %
Pyrene	79 %	86 %
Pesticides (8080)		
gamma-BHC	---	---
Heptachlor	---	---
Aldrin	---	---
Dieldrin	---	---
Endrin	---	---
4,4'-DDT	---	---

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D80

LOG NO: S1-37055

Received: 25 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS03/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES
37055-9	Equipment Blank

PARAMETER	37055-9
Selenium (7740)	
Selenium, ug/l	10U
Date Analyzed	11.17.91
Arsenic (7060)	
Arsenic, ug/l	10U
Date Analyzed	12.04.91
Thallium (7481)	
Thallium, ug/l	10UW
Date Analyzed	11.27.91
Pesticides (8080)	
Aroclor-1016, ug/l	0.50U
Aroclor-1221, ug/l	0.50U
Aroclor-1232, ug/l	0.50U
Aroclor-1242, ug/l	0.50U
Aroclor-1248, ug/l	0.50U
Aroclor-1254, ug/l	1.0U
Aroclor-1260, ug/l	1.0U
Date Extracted	10.29.91
Date Analyzed	12.03.91

Methods: CLP

Janette D. Long

Janette D. Long

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LOG NO: S1-37055

Received: 25 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS03/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES
37055-9	Equipment Blank

PARAMETER	37055-9
Metals (6010)	
Aluminum, ug/l	200U
Antimony, ug/l	50.0U
Barium, ug/l	10.0U
Beryllium, ug/l	5.0U
Cadmium, ug/l	5.0U
Calcium, ug/l	497B
Chromium, ug/l	10.0U
Cobalt, ug/l	10.0U
Copper, ug/l	25.0U
Iron, ug/l	171
Magnesium, ug/l	50.0U
Manganese, ug/l	10.0U
Nickel, ug/l	40.0U
Potassium, ug/l	1000U
Silver, ug/l	10.0U
Sodium , ug/l	500U
Vanadium, ug/l	10.0U
Zinc, ug/l	29.7
Date Analyzed	11.20.91
Mercury (7470)	
Mercury , ug/l	0.20U
Date Analyzed	11.14.91
Lead (7421)	
Lead, ug/l	5.0U
Date Analyzed	11.27.91

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LOG NO: S1-37055

Received: 25 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS03/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
37055-3	PI-B1 ((3-5')	10-24-91
37055-4	PI-B3 (1.5-3')	10-24-91
37055-5	PJ-B1 (3-5')	10-24-91
055-6	PJ-B3 (1.5-3')	10-24-91

PARAMETER	37055-3	37055-4	37055-5	37055-6
Lead (7421)				
Lead, mg/kg dw	14.1	44.5	26.2	76.8
Date Analyzed	11.29.91	12.03.91	11.29.91	11.27.91
Selenium (7740)				
Selenium, mg/kg dw	1.4UN	2.7UNW	2.7UWN	2.9UN
Date Analyzed	11.17.91	11.17.91	11.17.91	11.17.91
Arsenic (7060)				
Arsenic, mg/kg dw	11.1	7.3	4.4	8.4
Date Analyzed	12.04.91	12.04.91	12.04.91	12.04.91
Thallium (7841)				
Thallium, mg/kg dw	13.8UWN	13.9UWN	13.5UW	2.9UN
Date Analyzed	11.27.91	11.27.91	11.27.91	11.27.91
rcent Solids, %	71	71	69	66

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LOG NO: S1-37055

Received: 25 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS03/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
37055-3	PI-B1 ((3-5')	10-24-91
37055-4	PI-B3 (1.5-3')	10-24-91
37055-5	PJ-B1 (3-5')	10-24-91
37055-6	PJ-B3 (1.5-3')	10-24-91

PARAMETER	37055-3	37055-4	37055-5	37055-6
Metals (6010)				
Aluminum, mg/kg dw	9750*	13300*	7280*	13700
Antimony, mg/kg dw	14.0UN	13.5UN	13.9UN	14.6UN
Barium, mg/kg dw	189N*	294N*	258N*	279N*
Beryllium, mg/kg dw	1.4U	1.3U	1.4U	1.5U
Cadmium, mg/kg dw	1.4U	19.3U	1.6N	16.9N
Calcium, mg/kg dw	14900	4860	18000	3940
Chromium, mg/kg dw	15.0N	25.1N	15.9N	150N
Cobalt, mg/kg dw	8.6B	6.0B	8.0B	7.9B
Copper, mg/kg dw	24.3*	232*	90.5*	276*
Iron, mg/kg dw	19900	17400	15800	14000
Magnesium, mg/kg dw	7420	4120	7420	3110
Manganese, mg/kg dw	534	85.8	488	74.0
Nickel, mg/kg dw	19.8N*	222N*	34.3N*	377N*
Potassium, mg/kg dw	1940	2200	1650	2070
Silver, mg/kg dw	2.7UN	2.7UN	2.7UN	2.9U
Sodium , mg/kg dw	180B	162B	187B	1464
Vanadium, mg/kg dw	25.6	35.2	21.6	34.7
Zinc, mg/kg dw	83.3	3280	524	4300
Date Analyzed	11.20.91	11.20.91	11.20.91	11.20.91
Mercury (7471)				
Mercury , mg/kg dw	0.070	0.090	0.10	0.10
Date Analyzed	11.12.91	11.12.91	11.12.91	11.12.91

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D121

LOG NO: S1-37266A

Received: 06 NOV 91

Purchase Order: LTO#06490

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: NY60505-Monsanto/Dead Cr
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
37266A-2	Detection Limits-Liquid
37266A-3	Method Blank Result
37266A-4	Lab Control Standard (LCS) Result/Duplic ate
37266A-5	LCS Expected Value
37266A-6	LCS % Recovery/Duplicate

PARAMETER	37266A-2	37266A-3	37266A-4	37266A-5	37266A-6
Ignitability - Flash Point					
Ignitability-flash point, Degree F	---	>140	81.4/81.4	81.0	100/100 %
Date Analyzed	---	11.15.91	11.15.91	---	---
Sulfide (9030)					
Sulfide (9030) , mg/kg dw	2.5	<2.5	0.38/0.33	0.463	82/71 %
Date Analyzed	---	11.13.91	11.13.91	---	---
Cyanide (9010)					
Cyanide, Total, mg/kg dw	1.0	<1.0	3.98/4.14	4.0	100/104 %
Date Analyzed	---	11.11.91	11.11.91	---	---

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LOG NO: S1-37266A

Received: 06 NOV 91

Purchase Order: LTO#06490

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: NY60505-Monsanto/Dead Cr
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
37266A-1	M1, M2, M3	11-05-91

PARAMETER	37266A-1
Ignitability - Flash Point	
Ignitability-flash point, Degree F	*F6
Date Analyzed	11.15.91
Sulfide (9030)	
Sulfide (9030) , mg/kg dw	1400
Date Analyzed	11.13.91
Cyanide (9010)	
Cyanide, Total, mg/kg dw	<1.6
Date Analyzed	11.11.91
Percent Solids, %	64
pH in Soil (9045)	
pH-soil (9045), units	7.2
Date Analyzed	11.08.91

*F6 - The physical characteristics (hard, semisolid) of the sample prohibited continual stirring required by the Pensky-Martens Method. Therefore, the sample was heated without continual stirring and a test flame applied to the sample surface. No apparent ignition of vapors over the sample was observed.

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D123

LOG NO: S1-36621A

Received: 17 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, IL
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
36621A-15	Matrix Spike (GML1 (3-8') (% Recovery)

PARAMETER	36621A-15
Mercury (7470)	
Mercury (TCLP)	121 %
Date Extracted	10.21.91

Methods: EPA SW-846.

Methods SW-846-1311 - TCLP results which are above the quantitation limit have been corrected for analytical bias per instructions in Section 8.2.5 of Method 1311 (Federal Register, June 29, 1990). The first number reported is the corrected TCLP value (used to determine if the sample is hazardous) and the value in parenthesis ( ) is the uncorrected analytical result.

*F6 - The physical characteristics (hard, semisolid) of the sample prohibited continual stirring required by the Pensky-Martens Method. Therefore, the sample was heated without continual stirring and a test flame was applied to the sample surface. No apparent ignition of vapors over the sample was observed.

Janette D. Long

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LOG NO: S1-36621A

Received: 17 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, IL
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
36621A-15	Matrix Spike (GML1 (3-8') (% Recovery)

PARAMETER	36621A-15
Pesticides in TCLP extract	
Endrin (TCLP)	143 %
Heptachlor (TCLP)	130 %
Heptachlor epoxide (TCLP)	115 %
Lindane (g-BHC) (TCLP)	138 %
Methoxychlor (TCLP)	133 %
Surrogate-DBC	116 %
TCLP (1311) Sec. 7.2 Extraction Date	10.21.91
Date Extracted	10.23.91
Herbicides in TCLP	
2,4-D (TCLP)	70 %
2,4,5-TP Silvex (TCLP)	100 %
Date Analyzed	10.25.81
TCLP (1311) Sec. 7.2 Extraction Date	10.21.91
Date Extracted	10.23.91
Metals in TCLP (6010)	
Arsenic (TCLP)	104 %
Barium (TCLP)	95 %
Cadmium (TCLP)	89 %
Chromium (TCLP)	85 %
Lead (TCLP)	92 %
Selenium (TCLP)	102 %
Silver (TCLP)	81 %
Date Analyzed	10.24.91
Date Extracted	10.21.91

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D125

LOG NO: S1-36621A

Received: 17 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, IL
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
36621A-15	Matrix Spike (GML1 (3-8') (% Recovery)

PARAMETER	36621A-15
Semivolatiles in TCLP Extract	
1,4-Dichlorobenzene (TCLP)	81 %
2,4-Dinitrotoluene (TCLP)	98 %
Hexachlorobenzene (TCLP)	96 %
Hexachlorobutadiene (TCLP)	98 %
Hexachloroethane (TCLP)	93 %
Nitrobenzene (TCLP)	102 %
Pentachlorophenol (TCLP)	100 %
2,4,6-Trichlorophenol (TCLP)	100 %
Pyridine (TCLP)	18 %
Cresol (ortho) - TCLP	59 %
Surrogate-PLH	18 %
Surrogate-2FP	24 %
Surrogate-TBP	40 %
Surrogate-NBZ	94 %
Surrogate-2FBP	96 %
Surrogate-TPH	90 %
Date Analyzed	10.24.91
TCLP (1311) Sec. 7.2 Extraction Date	10.21.91
Date Extracted	10.23.91

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LOG NO: S1-36621A

Received: 17 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, IL
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
36621A-15	Matrix Spike (GML1 (3-8') (% Recovery)

PARAMETER	36621A-15
Volatiles in TCLP Extract	
Benzene (TCLP)	87 %
Carbon tetrachloride (TCLP)	108 %
Chlorobenzene (TCLP)	87 %
Chloroform (TCLP)	103 %
1,2-Dichloroethane (TCLP)	130 %
1,1-Dichloroethylene (TCLP)	37 %
Methyl ethyl ketone (TCLP)	117 %
Tetrachloroethylene (TCLP)	97 %
Trichloroethylene (TCLP)	90 %
Vinyl chloride (TCLP)	91 %
Surrogate - Toluene-d	102 %
Surrogate - 4-Bromofluorobenzene	96 %
Surrogate - 1,2-Dichloroethane-d4	114 %
TCLP (1311) Sec. 7.2 Extraction Date	10.21.91
Date Analyzed	10.23.91

SL SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

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D127

LOG NO: S1-36621A

Received: 17 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, IL
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
36621A-14	Extract Fluid Method Blank (mg/l)

PARAMETER	36621A-14
Metals in TCLP (6010)	
Arsenic (TCLP), mg/l	<0.20
Barium (TCLP), mg/l	<1.0
Cadmium (TCLP), mg/l	<0.010
Chromium (TCLP), mg/l	<0.050
Lead (TCLP), mg/l	<0.20
Selenium (TCLP), mg/l	<0.50
Silver (TCLP), mg/l	<0.010
Date Analyzed	10.24.91
Date Extracted	10.21.91
Mercury (7470)	
Mercury (TCLP) , mg/l	<0.020
Date Analyzed	10.28.91
Date Extracted	10.21.91

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LOG NO: S1-36621A

Received: 17 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, IL
Sampled By: Client

REPORT OF RESULTS

LOG NO SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES

36621A-14 Extract Fluid Method Blank (mg/l)

PARAMETER	36621A-14
Pesticides in TCLP extract	
Chlordane (TCLP), mg/l	<0.0050
Endrin (TCLP), mg/l	<0.0010
Heptachlor (TCLP), mg/l	<0.00050
Heptachlor epoxide (TCLP), mg/l	<0.00050
Lindane (g-BHC) (TCLP), mg/l	<0.00050
Methoxychlor (TCLP), mg/l	<0.025
Toxaphene (TCLP), mg/l	<0.050
Surrogate-DBC	103 %
Date Analyzed	10.24.91
TCLP (1311) Sec. 7.2 Extraction Date	10.21.91
Date Extracted	10.23.91
Herbicides in TCLP	
2,4-D (TCLP), mg/l	<0.050
2,4,5-TP Silvex (TCLP), mg/l	<0.010
Date Analyzed	10.25.91
TCLP (1311) Sec. 7.2 Extraction Date	10.21.91
Date Extracted	10.23.91

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D129

LOG NO: S1-36621A

Received: 17 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, IL
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
36621A-14	Extract Fluid Method Blank (mg/l)

PARAMETER	36621A-14
Semivolatiles in TCLP Extract	
1,4-Dichlorobenzene (TCLP), mg/l	<0.050
2,4-Dinitrotoluene (TCLP), mg/l	<0.050
Hexachlorobenzene (TCLP), mg/l	<0.050
Hexachlorobutadiene (TCLP), mg/l	<0.050
Hexachloroethane (TCLP), mg/l	<0.050
Nitrobenzene (TCLP), mg/l	<0.050
Pentachlorophenol (TCLP), mg/l	<0.25
2,4,5-Trichlorophenol (TCLP), mg/l	<0.25
2,4,6-Trichlorophenol (TCLP), mg/l	<0.050
Pyridine (TCLP), mg/l	<0.25
Cresol (ortho) - TCLP, mg/l	<0.050
Cresol m & p - TCLP, mg/l	<0.050
Surrogate-PLH	26 %
Surrogate-2FP	40 %
Surrogate-TBP	89 %
Surrogate-NBZ	86 %
Surrogate-2FBP	90 %
Surrogate-TPH	86 %
Date Analyzed	10.24.91
TCLP (1311) Sec. 7.2 Extraction Date	10.21.91
Date Extracted	10.23.91

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LOG NO: S1-36621A

Received: 17 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, IL
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
36621A-14	Extract Fluid Method Blank (mg/l)

PARAMETER	36621A-14
Volatiles in TCLP Extract	
Benzene (TCLP), mg/l	<0.020
Carbon tetrachloride (TCLP), mg/l	<0.020
Chlorobenzene (TCLP), mg/l	<0.020
Chloroform (TCLP), mg/l	<0.020
1,2-Dichloroethane (TCLP), mg/l	<0.020
1,1-Dichloroethylene (TCLP), mg/l	<0.020
Methyl ethyl ketone (TCLP), mg/l	<0.40
Tetrachloroethylene (TCLP), mg/l	<0.020
Trichloroethylene (TCLP), mg/l	<0.020
Vinyl chloride (TCLP), mg/l	<0.040
Surrogate - Toluene-d	100 %
Surrogate - 4-Bromofluorobenzene	99 %
Surrogate - 1,2-Dichloroethane-d4	112 %
TCLP (1311) Sec. 7.2 Extraction Date	10.21.91
Date Analyzed	10.23.91

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D131

LOG NO: S1-36621A

Received: 17 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, IL
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
36621A-12	GML1 (3-8')	10-16-91
36621A-13	GML1 (8-14')	10-16-91

PARAMETER	36621A-12	36621A-13
Metals in TCLP (6010)		
Arsenic (TCLP), mg/l	<0.20	<0.20
Barium (TCLP), mg/l	1.8(1.7)	1.4(1.3)
Cadmium (TCLP), mg/l	.066(.059)	.021(.019)
Chromium (TCLP), mg/l	<0.050	<0.050
Lead (TCLP), mg/l	0.24(0.22)	<0.20
Selenium (TCLP), mg/l	<0.50	<0.50
Silver (TCLP), mg/l	<0.010	<0.010
Date Analyzed	10.24.91	10.24.91
Date Extracted	10.21.91	10.21.91
Mercury (7470)		
Mercury (TCLP) , mg/l	<0.020	<0.020
Date Analyzed	10.28.91	10.28.91
Date Extracted	10.21.91	10.21.91

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SL SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

5102 LaRoche Avenue • Savannah, GA 31404 • (912) 354-7858 • Fax (912) 352-0165

LOG NO: S1-36621A

Received: 17 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, IL
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
36621A-12	GML1 (3-8')	10-16-91
36621A-13	GML1 (8-14')	10-16-91

PARAMETER	36621A-12	36621A-13
Pesticides in TCLP extract		
Chlordane (TCLP), mg/l	<0.0050	<0.0050
Endrin (TCLP), mg/l	<0.0010	<0.0010
Heptachlor (TCLP), mg/l	<0.00050	<0.00050
Heptachlor epoxide (TCLP), mg/l	<0.00050	<0.00050
Lindane (g-BHC) (TCLP), mg/l	<0.00050	<0.00050
Methoxychlor (TCLP), mg/l	<0.025	<0.025
Toxaphene (TCLP), mg/l	<0.050	<0.050
Surrogate-DBC	113 %	97 %
Date Analyzed	10.24.91	10.24.91
TCLP (1311) Sec. 7.2 Extraction Date	10.21.91	10.21.91
Date Extracted	10.23.91	10.23.91
Herbicides in TCLP		
2,4-D (TCLP), mg/l	<0.050	<0.050
2,4,5-TP Silvex (TCLP), mg/l	<0.010	<0.010
Date Analyzed	10.25.91	10.25.91
TCLP (1311) Sec. 7.2 Extraction Date	10.21.91	10.21.91
Date Extracted	10.23.91	10.23.91

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D133

LOG NO: S1-36621A

Received: 17 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, IL
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
36621A-12	GML1 (3-8')	10-16-91
36621A-13	GML1 (8-14')	10-16-91

PARAMETER	36621A-12	36621A-13
Semivolatiles in TCLP Extract		
1,4-Dichlorobenzene (TCLP), mg/l	0.41(0.33)	<0.050
2,4-Dinitrotoluene (TCLP), mg/l	<0.050	<0.050
Hexachlorobenzene (TCLP), mg/l	<0.050	<0.050
Hexachlorobutadiene (TCLP), mg/l	<0.050	<0.050
Hexachloroethane (TCLP), mg/l	<0.050	<0.050
Nitrobenzene (TCLP), mg/l	<0.050	<0.050
Pentachlorophenol (TCLP), mg/l	<0.25	<0.25
2,4,5-Trichlorophenol (TCLP), mg/l	<0.25	<0.25
2,4,6-Trichlorophenol (TCLP), mg/l	<0.050	<0.050
Pyridine (TCLP), mg/l	<0.25	<0.25
Cresol (ortho) - TCLP, mg/l	<0.050	<0.050
Cresol m & p - TCLP, mg/l	0.17(0.10)	0.19(0.11)
Surrogate-PLH	24 %	25 %
Surrogate-2FP	38 %	37 %
Surrogate-TBP	92 %	86 %
Surrogate-NBZ	85 %	110 %
Surrogate-2FBP	89 %	88 %
Surrogate-TPH	86 %	76 %
Date Analyzed	10.24.91	10.24.91
TCLP (1311) Sec. 7.2 Extraction Date	10.21.91	10.21.91
Date Extracted	10.23.91	10.23.91

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LOG NO: S1-36621A

Received: 17 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, IL
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
36621A-12	GML1 (3-8')	10-16-91
36621A-13	GML1 (8-14')	10-16-91

PARAMETER	36621A-12	36621A-13
TCLP extraction volatiles ZHE		
Phases	1	1
% that passes 9.5 mm sieve	100 %	100 %
Volatiles in TCLP Extract		
Benzene (TCLP), mg/l	<0.020	<0.020
Carbon tetrachloride (TCLP), mg/l	<0.020	<0.020
Chlorobenzene (TCLP), mg/l	.041(.036)	<0.020
Chloroform (TCLP), mg/l	<0.020	<0.020
1,2-Dichloroethane (TCLP), mg/l	<0.020	<0.020
1,1-Dichloroethylene (TCLP), mg/l	<0.020	<0.020
Methyl ethyl ketone (TCLP), mg/l	<0.40	<0.40
Tetrachloroethylene (TCLP), mg/l	<0.020	<0.020
Trichloroethylene (TCLP), mg/l	<0.020	<0.020
Vinyl chloride (TCLP), mg/l	<0.040	<0.040
Surrogate - Toluene-d	102 %	103 %
Surrogate - 4-Bromofluorobenzene	97 %	114 %
Surrogate - 1,2-Dichloroethane-d4	114 %	113 %
TCLP (1311) Sec. 7.2 Extraction Date	10.21.91	10.21.91
Date Analyzed	10.23.91	10.28.91
TCLP extraction - non-volatile		
Phases	1	1
% that passes 9.5 mm sieve	100 %	100 %
pH (7.1.4.2)	8.5	8.6
pH (7.1.4.4)	1.8	1.6
Extraction Fluid	1	1

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LOG NO: S1-36621A

Received: 17 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, IL
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
36621A-8	LCS Control Limit
36621A-9	LSC % RPD
36621A-10	% RPD Control Limit
36621A-11	Control Limits Source

PARAMETER	36621A-8	36621A-9	36621A-10	36621A-11
Cyanide (9010A)				
Cyanide, Total	75-125 %	1.9 %	<30 %	SL
Sulfide (9030)				
Sulfide (9030)	75-125 %	1.1 %	<30 %	SL
Ignitability - Flash Point				
Ignitability-flash point,	98-102 %	0 %	<20 %	SL

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LOG NO: S1-36621A

Received: 17 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, IL
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
36621A-3	Detection Limits - Liquid
36621A-4	Method Blank (Extraction) Result
36621A-5	Lab Control Standard (LCS) Result/Duplic ate
36621A-6	LCS Expected Value
36621A-7	LCS % Recovery/Duplicate

PARAMETER	36621A-3	36621A-4	36621A-5	36621A-6	36621A-7
Cyanide (9010A)					
Cyanide, Total, mg/kg dw	1.0	<1.0	4.1/4.2	4.0	103/105 %
Date Analyzed	---	10.24.91	10.24.91	---	---
Sulfide (9030)					
Sulfide (9030) , mg/kg dw	2.5	<2.5	5.64/5.69	6.25	90/91 %
Date Analyzed	---	10.22.91	10.22.91	---	---
Ignitability - Flash Point					
Ignitability-flash point, Degrees F	---	>140	81.4/81.4	81.0	100/100 %
Date Analyzed	---	10.29.91	10.29.91	---	---

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LOG NO: S1-36621A

Received: 17 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, IL
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
36621A-1	GML1 (3-8')	10-16-91
36621A-2	GML1 (8-14')	10-16-91

PARAMETER	36621A-1	36621A-2
Cyanide (9010A)		
Cyanide, Total, mg/kg dw	<1.0	<1.1
Date Analyzed	10.24.91	10.24.91
Sulfide (9030)		
Sulfide (9030) , mg/kg dw	71	24
Date Analyzed	10.22.91	10.22.91
pH in Soil (9045)		
pH-soil (9045), units	8.2	8.4
Date Analyzed	10.23.91	10.23.91
Ignitability - Flash Point		
Ignitability-flash point, Degrees F	*F6	*F6
Date Analyzed	10.29.91	10.29.91

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LOG NO: S1-37055A

Received: 25 OCT 91

Purchase Order: LTO#06490

Mr. Dennis Colton
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: NY60503/Dead Creek
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
37055A-10	LCS Control Limit
37055A-11	LCS % RPD
37055A-12	% RPD Control Limit
37055A-13	Control Limit Source

PARAMETER	37055A-10	37055A-11	37055A-12	37055A-13
Ignitability - Flash Point				
Ignitability-flash point,	90-110 %	0 %	<20 %	SL
Sulfide (9030)				
Sulfide (9030)	75-125 %	3.6 %	<30 %	SL
Cyanide (9010)				
Cyanide, Total	75-125 %	0.96 %	<30 %	SL

Methods: EPA SW-846.

Janette D. Long

Janette D. Long

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D139

LOG NO: S1-37055A

Received: 25 OCT 91

Purchase Order: LTO#06490

Mr. Dennis Colton
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: NY60503/Dead Creek
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
37055A-5	Detection Limits - Soil
37055A-6	Method Blank (Extraction) Result
37055A-7	Lab Control Standard (LCS) Result/Duplicate
37055A-8	LCS Expected Value
37055A-9	LCS % Recovery/Duplicate

PARAMETER	37055A-5	37055A-6	37055A-7	37055A-8	37055A-9
Ignitability - Flash Point					
Ignitability-flash point,	---	>140	81.5/81.5	81	103/103 %
Date Analyzed	---	10.30.91	10.30.91	---	---
Sulfide (9030)					
Sulfide (9030) , mg/kg dw	2.5	<2.5	12.8/12.3	12.5	102/99 %
Date Analyzed	---	10.30.91	10.30.91	---	---
Cyanide (9010)					
Cyanide, Total, mg/kg dw	1.0	<1.0	4.12/4.16	4.0	103/104 %
Date Analyzed	---	10.30.91	10.30.91	---	---

Methods: EPA SW-846.

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LOG NO: S1-37055A

Received: 25 OCT 91

Purchase Order: LTO#06490

Mr. Dennis Colton
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: NY60503/Dead Creek
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
37055A-4	PI,PJ	10-24-91

PARAMETER	37055A-4
Ignitability - Flash Point	
Ignitability-flash point, Degrees F	*F6
Date Analyzed	10.30.91
Sulfide (9030)	
Sulfide (9030) , mg/kg dw	<4.5
Date Analyzed	10.30.91
Cyanide (9010)	
Cyanide, Total, mg/kg dw	<1.8
Date Analyzed	10.30.91
pH in Soil (9045)	
pH-soil (9045), units	6.5
Date Analyzed	10.25.91
Percent Solids, %	56 %

*The physical characteristics (hard, semisolid) of the sample prohibited continual stirring required by the Pensky Martens Method. Therefore the sample was heated without continual stirring and a test flame applied to the sample surface. No apparent ignition of vapors over the sample was observed.

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D141

LOG NO: S1-37055A

Received: 25 OCT 91

Purchase Order: LTO#06490

Mr. Dennis Colton
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: NY60503/Dead Creek
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
37055A-3	Extract Fluid Method Blank (mg/l)

PARAMETER	37055A-3
Metals in TCLP (6010)	
Arsenic (TCLP), mg/l	<0.20
Barium (TCLP), mg/l	<1.0
Cadmium (TCLP), mg/l	<0.010
Chromium (TCLP), mg/l	<0.050
Lead (TCLP), mg/l	<0.20
Selenium (TCLP), mg/l	<0.50
Silver (TCLP), mg/l	<0.010
Date Analyzed	11.04.91
TCLP (1311) Sec. 7.2 Extraction Date	10.25.91
Mercury (7470)	
Mercury (TCLP) , mg/l	<0.020
Date Analyzed	10.31.91
TCLP (1311) Sec. 7.2 Extraction Date	10.25.91

Methods SW-846-1311 - TCLP results which are above the quantitation limit have been corrected for analytical bias per instructions in Section 8.2.5 of Method 1311 (Federal Register, June 29, 1990). The first number reported is the corrected TCLP value (used to determine if the sample is hazardous) and the value in parenthesis ( ) is the uncorrected analytical result.

D14-2

SL SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

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LOG NO: S1-37055A

Received: 25 OCT 91

Purchase Order: LTC#06490

Mr. Dennis Colton
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: NY60503/Dead Creek
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
37055A-3	Extract Fluid Method Blank (mg/l)

PARAMETER	37055A-3
Pesticides in TCLP extract	
Chlordane (TCLP), mg/l	<0.0050
Endrin (TCLP), mg/l	<0.0010
Heptachlor (TCLP), mg/l	<0.00050
Heptachlor epoxide (TCLP), mg/l	<0.00050
Lindane (g-BHC) (TCLP), mg/l	<0.00050
Methoxychlor (TCLP), mg/l	<0.025
Toxaphene (TCLP), mg/l	<0.050
Surrogate-DBC	73 %
Date Analyzed	10.30.91
TCLP (1311) Sec. 7.2 Extraction Date	10.25.91
Date Extracted	10.28.91
Herbicides in TCLP	
2,4-D (TCLP), mg/l	<0.050
2,4,5-TP Silvex (TCLP), mg/l	<0.010
Date Analyzed	10.29.91
TCLP (1311) Sec. 7.2 Extraction Date	10.25.91
Date Extracted	10.29.91

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D143

LOG NO: S1-37055A

Received: 25 OCT 91

Purchase Order: LTO#06490

Mr. Dennis Colton
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: NY60503/Dead Creek
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
37055A-3	Extract Fluid Method Blank (mg/l)

PARAMETER	37055A-3
Semivolatiles in TCLP Extract	
1,4-Dichlorobenzene (TCLP), mg/l	<0.050
2,4-Dinitrotoluene (TCLP), mg/l	<0.050
Hexachlorobenzene (TCLP), mg/l	<0.050
Hexachlorobutadiene (TCLP), mg/l	<0.050
Hexachloroethane (TCLP), mg/l	<0.050
Nitrobenzene (TCLP), mg/l	<0.050
Pentachlorophenol (TCLP), mg/l	<0.25
2,4,5-Trichlorophenol (TCLP), mg/l	<0.25
2,4,6-Trichlorophenol (TCLP), mg/l	<0.050
Pyridine (TCLP), mg/l	<0.25
Cresol (ortho) - TCLP, mg/l	<0.050
Cresol m & p - TCLP, mg/l	<0.050
Surrogate-PLH	47 %
Surrogate-2FP	62 %
Surrogate-TBP	91 %
Surrogate-NBZ	80 %
Surrogate-2FBP	90 %
Surrogate-TPH	92 %
Date Analyzed	10.30.91
TCLP (1311) Sec. 7.2 Extraction Date	10.25.91
Date Extracted	10.28.91

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LOG NO: S1-37055A

Received: 25 OCT 91

Purchase Order: LTO#06490

Mr. Dennis Colton
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: NY60503/Dead Creek
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
37055A-3	Extract Fluid Method Blank (mg/l)

PARAMETER	37055A-3
TCLP extraction volatiles ZHE	
Phases	1
% that passes 9.5 mm sieve	100 %
Volatiles in TCLP Extract	
Benzene (TCLP), mg/l	<0.020
Carbon tetrachloride (TCLP), mg/l	<0.020
Chlorobenzene (TCLP), mg/l	<0.020
Chloroform (TCLP), mg/l	<0.020
1,2-Dichloroethane (TCLP), mg/l	<0.020
1,1-Dichloroethylene (TCLP), mg/l	<0.020
Methyl ethyl ketone (TCLP), mg/l	<0.40
Tetrachloroethylene (TCLP), mg/l	<0.020
Trichloroethylene (TCLP), mg/l	<0.020
Vinyl chloride (TCLP), mg/l	<0.040
Surrogate - Toluene-d	108 %
Surrogate - 4-Bromofluorobenzene	102 %
Surrogate - 1,2-Dichloroethane-d4	108 %
Date Analyzed	11.02.91
TCLP (1311) Sec. 7.2 Extraction Date	10.28.91
TCLP extraction - non-volatile	
Phases	1
% that passes 9.5 mm sieve	100 %
pH (7.1.4.2)	4.91
pH (7.1.4.4)	4.91
Extraction Fluid	1

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D145

LOG NO: S1-37055A

Received: 25 OCT 91

Purchase Order: LTO#06490

Mr. Dennis Colton
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: NY60503/Dead Creek
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
37055A-2	GML1 (3-8') Matrix Spike (% Recovery)

PARAMETER	37055A-2
Mercury (7470)	
Mercury (TCLP)	121 %
Date Analyzed	10.21.91
TCLP (1311) Sec. 7.2 Extraction Date	10.21.91

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LOG NO: S1-37055A

Received: 25 OCT 91

Purchase Order: LTO#06490

Mr. Dennis Colton
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: NY60503/Dead Creek
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
37055A-2	GML1 (3-8') Matrix Spike (% Recovery)

PARAMETER	37055A-2
Pesticides in TCLP extract	
Endrin (TCLP)	143 %
Heptachlor (TCLP)	130 %
Heptachlor epoxide (TCLP)	115 %
Lindane (g-BHC) (TCLP)	138 %
Methoxychlor (TCLP)	133 %
Surrogate-DBC	116 %
Date Analyzed	10.24.91
TCLP (1311) Sec. 7.2 Extraction Date	10.21.91
Date Extracted	10.23.91
Herbicides in TCLP	
2,4-D (TCLP)	70 %
2,4,5-TP Silvex (TCLP)	100 %
Date Analyzed	10.25.91
TCLP (1311) Sec. 7.2 Extraction Date	10.21.91
Date Extracted	10.23.91
Metals in TCLP (6010)	
Arsenic (TCLP)	91 %
Barium (TCLP)	97 %
Cadmium (TCLP)	86 %
Chromium (TCLP)	93 %
Lead (TCLP)	89 %
Selenium (TCLP)	100 %
Silver (TCLP)	80 %
Date Analyzed	10.24.91
TCLP (1311) Sec. 7.2 Extraction Date	10.21.91

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D147

LOG NO: S1-37055A

Received: 25 OCT 91

Purchase Order: LTO#06490

Mr. Dennis Colton
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: NY60503/Dead Creek
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
37055A-2	GML1 (3-8') Matrix Spike (% Recovery)

PARAMETER	37055A-2
Semivolatiles in TCLP Extract	
1,4-Dichlorobenzene (TCLP)	81 %
2,4-Dinitrotoluene (TCLP)	98 %
Hexachlorobenzene (TCLP)	96 %
Hexachlorobutadiene (TCLP)	98 %
Hexachloroethane (TCLP)	93 %
Nitrobenzene (TCLP)	102 %
Pentachlorophenol (TCLP)	100 %
2,4,6-Trichlorophenol (TCLP)	100 %
Pyridine (TCLP)	18 %
Cresol (ortho) - TCLP,	59 %
Surrogate-PLH	24 %
Surrogate-2FP	40 %
Surrogate-TBP	96 %
Surrogate-NBZ	94 %
Surrogate-2FBP	96 %
Surrogate-TPH	90 %
Date Analyzed	10.24.91
Date Extracted	10.23.91

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SL SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

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LOG NO: S1-37055A

Received: 25 OCT 91

Purchase Order: LTO#06490

Mr. Dennis Colton
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: NY60503/Dead Creek
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
37055A-2	GML1 (3-8') Matrix Spike (% Recovery)

PARAMETER	37055A-2
TCLP extraction volatiles ZHE	
Volatiles in TCLP Extract	
Benzene (TCLP)	87 %
Carbon tetrachloride (TCLP)	108 %
Chlorobenzene (TCLP)	87 %
Chloroform (TCLP)	103 %
1,2-Dichloroethane (TCLP)	130 %
1,1-Dichloroethylene (TCLP)	37 %
Methyl ethyl ketone (TCLP)	117 %
Tetrachloroethylene (TCLP)	97 %
Trichloroethylene (TCLP)	90 %
Vinyl chloride (TCLP)	91 %
Surrogate - Toluene-d	102 %
Surrogate - 4-Bromofluorobenzene	96 %
Surrogate - 1,2-Dichloroethane-d4	114 %
Date Analyzed	10.23.91
TCLP extraction - non-volatile	

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D149

LOG NO: S1-37055A

Received: 25 OCT 91

Purchase Order: LTO#06490

Mr. Dennis Colton
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: NY60503/Dead Creek
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
37055A-1	PI,PJ	10-24-91

PARAMETER	37055A-1
Metals in TCLP (6010)	
Arsenic (TCLP), mg/l	<0.20
Barium (TCLP), mg/l	2.5(2.5)
Cadmium (TCLP), mg/l	0.51(0.43)
Chromium (TCLP), mg/l	<0.050
Lead (TCLP), mg/l	0.23(0.21)
Selenium (TCLP), mg/l	<0.50
Silver (TCLP), mg/l	<0.010
Date Analyzed	11.04.91
TCLP (1311) Sec. 7.2 Extraction Date	10.25.91
Mercury (7470)	
Mercury (TCLP) , mg/l	<0.020
Date Analyzed	10.31.91
TCLP (1311) Sec. 7.2 Extraction Date	10.25.91

D150

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LOG NO: S1-37055A

Received: 25 OCT 91

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Project: NY60503/Dead Creek
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
37055A-1	PI,PJ	10-24-91

PARAMETER	37055A-1
Pesticides in TCLP extract	
Chlordane (TCLP), mg/l	<0.0050
Endrin (TCLP), mg/l	<0.0010
Heptachlor (TCLP), mg/l	<0.00050
Heptachlor epoxide (TCLP), mg/l	<0.00050
Lindane (g-BHC) (TCLP), mg/l	<0.00050
Methoxychlor (TCLP), mg/l	<0.025
Toxaphene (TCLP), mg/l	<0.050
Surrogate-DBC	87 %
Date Analyzed	10.30.91
TCLP (1311) Sec. 7.2 Extraction Date	10.25.91
Date Extracted	10.28.91
Herbicides in TCLP	
2,4-D (TCLP), mg/l	<0.050
2,4,5-TP Silvex (TCLP), mg/l	<0.010
Date Analyzed	10.30.91
TCLP (1311) Sec. 7.2 Extraction Date	10.25.91
Date Extracted	10.29.91

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D151

LOG NO: S1-37055A

Received: 25 OCT 91

Purchase Order: LTO#06490

Mr. Dennis Colton
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: NY60503/Dead Creek
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
37055A-1	PI,PJ	10-24-91

PARAMETER	37055A-1
Semivolatiles in TCLP Extract	
1,4-Dichlorobenzene (TCLP), mg/l	<0.050
2,4-Dinitrotoluene (TCLP), mg/l	<0.050
Hexachlorobenzene (TCLP), mg/l	<0.050
Hexachlorobutadiene (TCLP), mg/l	<0.050
Hexachloroethane (TCLP), mg/l	<0.050
Nitrobenzene (TCLP), mg/l	<0.050
Pentachlorophenol (TCLP), mg/l	<0.25
2,4,5-Trichlorophenol (TCLP), mg/l	<0.25
2,4,6-Trichlorophenol (TCLP), mg/l	<0.050
Pyridine (TCLP), mg/l	<0.25
Cresol (ortho) - TCLP, mg/l	<0.050
Cresol m & p - TCLP, mg/l	<0.050
Surrogate-PLH	42 %
Surrogate-2FP	58 %
Surrogate-TBP	85 %
Surrogate-NBZ	81 %
Surrogate-2FBP	84 %
Surrogate-TPH	81 %
Date Analyzed	10.30.91
TCLP (1311) Sec. 7.2 Extraction Date	10.25.91
Date Extracted	10.28.91

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LOG NO: S1-37055A

Received: 25 OCT 91

Purchase Order: LTO#06490

Mr. Dennis Colton
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: NY60503/Dead Creek
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
37055A-1	PI,PJ	10-24-91

PARAMETER	37055A-1
TCLP extraction volatiles ZHE	
Phases	1
% that passes 9.5 mm sieve	100 %
Volatiles in TCLP Extract	
Benzene (TCLP), mg/l	<0.020
Carbon tetrachloride (TCLP), mg/l	0.035
Chlorobenzene (TCLP), mg/l	.045(.039)
Chloroform (TCLP), mg/l	<0.020
1,2-Dichloroethane (TCLP), mg/l	0.027
1,1-Dichloroethylene (TCLP), mg/l	0.41(0.15)
Methyl ethyl ketone (TCLP), mg/l	<0.40
Tetrachloroethylene (TCLP), mg/l	<0.020
Trichloroethylene (TCLP), mg/l	<0.020
Vinyl chloride (TCLP), mg/l	<0.040
Surrogate - Toluene-d	108 %
Surrogate - 4-Bromofluorobenzene	102 %
Surrogate - 1,2-Dichloroethane-d4	114 %
Date Analyzed	11.02.91
TCLP (1311) Sec. 7.2 Extraction Date	10.28.91
TCLP extraction - non-volatile	
Phases	1
% that passes 9.5 mm sieve	100 %
pH (7.1.4.2)	6.9
pH (7.1.4.4)	1.6
Extraction Fluid	1

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D153

LOG NO: S1-37031A

Received: 24 OCT 91

Purchase Order: LTO# 06490

Mr. Dennis Colton
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: NY60503-Dead Creek
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
37031A-10	LCS Control Limit
37031A-11	LCS % RPD
37031A-12	% RPD Control Limit
37031A-13	Control Limit Source

PARAMETER	37031A-10	37031A-11	37031A-12	37031A-13
Ignitability - Flash Point				
Ignitability-flash point, Degrees F	90-110 %	0 %	<20 %	SL
Sulfide (9030)				
Sulfide (9030)	75-125 %	3.6 %	<30 %	SL
Total Cyanide (9010A)				
Cyanide, Total	75-125 %	0.96 %	<30 %	SL

Methods: EPA SW-846.

Janette D. Long

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LOG NO: S1-37031A

Received: 24 OCT 91

Purchase Order: LTO# 06490

Mr. Dennis Colton
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: NY60503-Dead Creek
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
37031A-5	Detection Limits - Soil
37031A-6	Method Blank (Extraction) Result
37031A-7	Lab Control Standard (LCS) Result/Duplic ate
37031A-8	LCS Expected Value
37031A-9	LCS % Recovery/Duplicate

PARAMETER	37031A-5	37031A-6	37031A-7	37031A-8	37031A-9
Ignitability - Flash Point					
Ignitability-flash point, Degrees F	---	>140	82/82	81	103/103 %
Date Analyzed	---	10.30.91	10.30.91	---	---
Sulfide (9030)					
Sulfide (9030) , mg/kg dw	2.5	<2.5	12.8/12.3	12.5	102/99 %
Date Analyzed	---	10.30.91	10.30.91	---	---
Total Cyanide (9010A)					
Cyanide, Total, mg/kg dw	1.0	<1.0	4.12/4.16	4.0	103/104 %
Date Analyzed	---	10.30.91	10.30.91	---	---

Methods: EPA SW-846.

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D155

LOG NO: S1-37031A

Received: 24 OCT 91

Purchase Order: LTO# 06490

Mr. Dennis Colton
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: NY60503-Dead Creek
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
37031A-4	PF, PG, PH	10-23-91

PARAMETER	37031A-4
Ignitability - Flash Point	
Ignitability-flash point,	*F6
Date Analyzed	10.30.91
Sulfide (9030)	
Sulfide (9030) , mg/kg dw	<3.8
Date Analyzed	10.30.91
Total Cyanide (9010A)	
Cyanide, Total, mg/kg dw	<1.5
Date Analyzed	10.30.91
Percent Solids, %	66
pH in Soil (9045)	
pH-soil (9045), units	6.8
Date Analyzed	10.25.91

*The physical characteristics (hard, semisolid) of the sample prohibited continual stirring required by the Pensky Martens Method. Therefore the sample was heated without continual stirring and a test flame applied to the sample surface. No apparent ignition of vapors over the sample was observed.

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LOG NO: S1-37031A

Received: 24 OCT 91

Purchase Order: LTO# 06490

Mr. Dennis Colton
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: NY60503-Dead Creek
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
37031A-3	GML1 (3-8')(S136621) Matrix Spike (% Recovery)

PARAMETER	37031A-3
Mercury (7470)	
Mercury (TCLP)	121 %
Date Analyzed	10.21.91
TCLP (1311) Sec. 7.2 Extraction Date	10.21.91

Methods SW-846-1311 - TCLP results which are above the quantitation limit have been corrected for analytical bias per instructions in Section 8.2.5 of Method 1311 (Federal Register, June 19, 1990). The first number reported is the corrected TCLP value (used to determine if the sample is hazardous) and the value in parenthesis ( ) is the uncorrected analytical result.

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D157

LOG NO: S1-37031A

Received: 24 OCT 91

Purchase Order: LTO# 06490

Mr. Dennis Colton
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: NY60503-Dead Creek
Sampled By: Client

REPORT OF RESULTS

LOG NO SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID

37031A-3 GML1 (3-8')(S136621) Matrix Spike (% Recovery)

PARAMETER	37031A-3
Pesticides in TCLP extract	
Endrin (TCLP)	143 %
Heptachlor (TCLP)	130 %
Heptachlor epoxide (TCLP)	115 %
Lindane (g-BHC) (TCLP)	138 %
Methoxychlor (TCLP)	133 %
Surrogate-DBC	116 %
Date Analyzed	10.24.91
TCLP (1311) Sec. 7.2 Extraction Date	10.21.91
Date Extracted	10.23.91
Herbicides in TCLP	
2,4-D (TCLP)	70 %
2,4,5-TP Silvex (TCLP)	100 %
Date Analyzed	10.25.91
TCLP (1311) Sec. 7.2 Extraction Date	10.21.91
Date Extracted	10.23.91
Metals in TCLP (6010)	
Arsenic (TCLP)	91 %
Barium (TCLP)	97 %
Cadmium (TCLP)	86 %
Chromium (TCLP)	93 %
Lead (TCLP)	89 %
Selenium (TCLP)	100 %
Silver (TCLP)	80 %
Date Analyzed	10.24.91
TCLP (1311) Sec. 7.2 Extraction Date	10.21.91

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LOG NO: S1-37031A

Received: 24 OCT 91

Purchase Order: LTO# 06490

Mr. Dennis Colton
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: NY60503-Dead Creek
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
37031A-3	GML1 (3-8')(S136621) Matrix Spike (% Recovery)

PARAMETER	37031A-3
Semivolatiles in TCLP Extract	
1,4-Dichlorobenzene (TCLP)	81 %
2,4-Dinitrotoluene (TCLP)	98 %
Hexachlorobenzene (TCLP)	96 %
Hexachlorobutadiene (TCLP)	98 %
Hexachloroethane (TCLP)	93 %
Nitrobenzene (TCLP)	102 %
Pentachlorophenol (TCLP)	100 %
2,4,6-Trichlorophenol (TCLP)	100 %
Pyridine (TCLP)	18 %
Cresol (ortho) - TCLP,	59 %
Surrogate-PLH	24 %
Surrogate-2FP	40 %
Surrogate-TBP	96 %
Surrogate-NBZ	94 %
Surrogate-2FBP	96 %
Surrogate-TPH	90 %
Date Analyzed	10.24.91
TCLP (1311) Sec. 7.2 Extraction Date	10.21.91
Date Extracted	10.23.91

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D159

LOG NO: S1-37031A

Received: 24 OCT 91

Purchase Order: LTO# 06490

Mr. Dennis Colton
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: NY60503-Dead Creek
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
37031A-3	GML1 (3-8')(S136621) Matrix Spike (% Recovery)

PARAMETER	37031A-3
Volatiles in TCLP Extract	
Benzene (TCLP)	87 %
Carbon tetrachloride (TCLP)	108 %
Chlorobenzene (TCLP)	87 %
Chloroform (TCLP)	103 %
1,2-Dichloroethane (TCLP)	130 %
1,1-Dichloroethylene (TCLP)	37 %
Methyl ethyl ketone (TCLP)	117 %
Tetrachloroethylene (TCLP)	97 %
Trichloroethylene (TCLP)	90 %
Vinyl chloride (TCLP)	91 %
Surrogate - Toluene-d	102 %
Surrogate - 4-Bromofluorobenzene	96 %
Surrogate - 1,2-Dichloroethane-d4	114 %
Date Analyzed	10.23.91

D160

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LOG NO: S1-37031A

Received: 24 OCT 91

Purchase Order: LTO# 06490

Mr. Dennis Colton
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: NY60503-Dead Creek
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
37031A-2	Extract Fluid Method Blank (mg/l)

PARAMETER	37031A-2
Metals in TCLP (6010)	
Arsenic (TCLP), mg/l	<0.20
Barium (TCLP), mg/l	<1.0
Cadmium (TCLP), mg/l	<0.010
Chromium (TCLP), mg/l	<0.050
Lead (TCLP), mg/l	<0.20
Selenium (TCLP), mg/l	<0.50
Silver (TCLP), mg/l	<0.010
Date Analyzed	11.04.91
TCLP (1311) Sec. 7.2 Extraction Date	10.24.91
Mercury (7470)	
Mercury (TCLP) , mg/l	<0.020
Date Analyzed	10.31.91
TCLP (1311) Sec. 7.2 Extraction Date	10.24.91

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D161

LOG NO: S1-37031A

Received: 24 OCT 91

Purchase Order: LTO# 06490

Mr. Dennis Colton
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: NY60503-Dead Creek
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
37031A-2	Extract Fluid Method Blank (mg/l)

PARAMETER	37031A-2
Pesticides in TCLP extract	
Chlordane (TCLP), mg/l	<0.0050
Endrin (TCLP), mg/l	<0.0010
Heptachlor (TCLP), mg/l	<0.00050
Heptachlor epoxide (TCLP), mg/l	<0.00050
Lindane (g-BHC) (TCLP), mg/l	<0.00050
Methoxychlor (TCLP), mg/l	<0.025
Toxaphene (TCLP), mg/l	<0.050
Surrogate-DBC	73 %
Date Analyzed	10.30.91
TCLP (1311) Sec. 7.2 Extraction Date	10.24.91
Date Extracted	10.28.91
Herbicides in TCLP	
2,4-D (TCLP), mg/l	<0.050
2,4,5-TP Silvex (TCLP), mg/l	<0.010
Date Analyzed	10.30.91
TCLP (1311) Sec. 7.2 Extraction Date	10.24.91
Date Extracted	10.29.91

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LOG NO: S1-37031LA

Received: 24 OCT 91

Purchase Order: LTO# 06490

Mr. Dennis Colton
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: NY60503-Dead Creek
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
37031LA-2	Extract Fluid Method Blank (mg/l)

PARAMETER	37031LA-2
Semivolatiles in TCLP Extract	
1,4-Dichlorobenzene (TCLP), mg/l	<0.050
2,4-Dinitrotoluene (TCLP), mg/l	<0.050
Hexachlorobenzene (TCLP), mg/l	<0.050
Hexachlorobutadiene (TCLP), mg/l	<0.050
Hexachloroethane (TCLP), mg/l	<0.050
Nitrobenzene (TCLP), mg/l	<0.050
Pentachlorophenol (TCLP), mg/l	<0.25
2,4,5-Trichlorophenol (TCLP), mg/l	<0.25
2,4,6-Trichlorophenol (TCLP), mg/l	<0.050
Pyridine (TCLP), mg/l	<0.25
Cresol (ortho) - TCLP, mg/l	<0.050
Cresol m & p - TCLP, mg/l	<0.050
Surrogate-PLH	47 %
Surrogate-2FP	62 %
Surrogate-TBP	91 %
Surrogate-NBZ	80 %
Surrogate-2FBP	90 %
Surrogate-TPH	92 %
Date Analyzed	10.30.91
TCLP (1311) Sec. 7.2 Extraction Date	10.24.91
Date Extracted	10.28.91

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D163

LOG NO: S1-37031A

Received: 24 OCT 91

Purchase Order: LTO# 06490

Mr. Dennis Colton
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: NY60503-Dead Creek
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
37031A-2	Extract Fluid Method Blank (mg/l)

PARAMETER	37031A-2
TCLP extraction volatiles ZHE	
Phases	1
% that passes 9.5 mm sieve	100 %
Volatiles in TCLP Extract	
Benzene (TCLP), mg/l	<0.020
Carbon tetrachloride (TCLP), mg/l	<0.020
Chlorobenzene (TCLP), mg/l	<0.020
Chloroform (TCLP), mg/l	<0.020
1,2-Dichloroethane (TCLP), mg/l	<0.020
1,1-Dichloroethylene (TCLP), mg/l	<0.020
Methyl ethyl ketone (TCLP), mg/l	<0.40
Tetrachloroethylene (TCLP), mg/l	<0.020
Trichloroethylene (TCLP), mg/l	<0.020
Vinyl chloride (TCLP), mg/l	<0.040
Surrogate - Toluene-d	108 %
Surrogate - 4-Bromofluorobenzene	102 %
Surrogate - 1,2-Dichloroethane-d4	108 %
Date Analyzed	11.02.91
TCLP (1311) Sec. 7.2 Extraction Date	10.28.91
TCLP extraction - non-volatile	
Phases	1
% that passes 9.5 mm sieve	100 %
pH (7.1.4.2)	4.91
pH (7.1.4.4)	4.91
Extraction Fluid	1

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LOG NO: S1-37031A

Received: 24 OCT 91

Purchase Order: LTO# 06490

Mr. Dennis Colton
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Plainview, NY 11803

Project: NY60503-Dead Creek
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
37031A-1	PF,PG,PH	10-23-91

PARAMETER	37031A-1
Metals in TCLP (6010)	
Arsenic (TCLP), mg/l	<0.20
Barium (TCLP), mg/l	2.5(2.4)
Cadmium (TCLP), mg/l	0.34(0.29)
Chromium (TCLP), mg/l	<0.050
Lead (TCLP), mg/l	0.29(0.26)
Selenium (TCLP), mg/l	<0.50
Silver (TCLP), mg/l	<0.010
Date Analyzed	11.04.91
TCLP (1311) Sec. 7.2 Extraction Date	10.24.91
Mercury (7470)	
Mercury (TCLP) , mg/l	<0.020
Date Analyzed	10.31.91
TCLP (1311) Sec. 7.2 Extraction Date	10.24.91

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D 165

LOG NO: S1-37031A

Received: 24 OCT 91

Purchase Order: LTO# 06490

Mr. Dennis Colton
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: NY60503-Dead Creek
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
37031A-1	PF,PG,PH	10-23-91

PARAMETER	37031A-1
Pesticides in TCLP extract	
Chlordane (TCLP), mg/l	<0.0050
Endrin (TCLP), mg/l	<0.0010
Heptachlor (TCLP), mg/l	<0.00050
Heptachlor epoxide (TCLP), ug/l	<0.00050
Lindane (g-BHC) (TCLP), mg/l	<0.00050
Methoxychlor (TCLP), mg/l	<0.025
Toxaphene (TCLP), mg/l	<0.005
Surrogate-DBC	79 %
Date Analyzed	10.30.91
TCLP (1311) Sec. 7.2 Extraction Date	10.24.91
Date Extracted	10.28.91
Herbicides in TCLP	
2,4-D (TCLP), mg/l	<0.050
2,4,5-TP Silvex (TCLP), mg/l	<0.010
Date Analyzed	10.30.91
TCLP (1311) Sec. 7.2 Extraction Date	10.24.91
Date Extracted	10.29.91

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SL SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

5102 LaRoche Avenue • Savannah, GA 31404 • (912) 354-7858 • Fax (912) 352-0165

LOG NO: S1-37031A

Received: 24 OCT 91

Purchase Order: LTO# 06490

Mr. Dennis Colton
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: NY60503-Dead Creek
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
37031A-1	PF,PG,PH	10-23-91

PARAMETER	37031A-1
Semivolatiles in TCLP Extract	
1,4-Dichlorobenzene (TCLP), mg/l	<0.050
2,4-Dinitrotoluene (TCLP), mg/l	<0.050
Hexachlorobenzene (TCLP), mg/l	<0.050
Hexachlorobutadiene (TCLP), mg/l	<0.050
Hexachloroethane (TCLP), mg/l	<0.050
Nitrobenzene (TCLP), mg/l	<0.050
Pentachlorophenol (TCLP), mg/l	<0.25
2,4,5-Trichlorophenol (TCLP), mg/l	<0.25
2,4,6-Trichlorophenol (TCLP), mg/l	<0.050
Pyridine (TCLP), mg/l	<0.25
Cresol (ortho) - TCLP, mg/l	<0.050
Cresol m & p - TCLP, mg/l	<0.050
Surrogate-PLH	42 %
Surrogate-2FP	56 %
Surrogate-TBP	92 %
Surrogate-NBZ	75 %
Surrogate-2FBP	86 %
Surrogate-TPH	89 %
Date Analyzed	10.30.91
TCLP (1311) Sec. 7.2 Extraction Date	10.24.91
Date Extracted	10.28.91

SL SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

5102 LaRoche Avenue • Savannah, GA 31404 • (912) 354-7858 • Fax (912) 352-0165

D167

LOG NO: S1-37031A

Received: 24 OCT 91

Purchase Order: LTO# 06490

Mr. Dennis Colton
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: NY60503-Dead Creek
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
37031A-1	PF,PG,PH	10-23-91

PARAMETER	37031A-1
TCLP extraction volatiles ZHE	
Phases	1
% that passes 9.5 mm sieve	100 %
Volatiles in TCLP Extract	
Benzene (TCLP), mg/l	<0.020
Carbon tetrachloride (TCLP), mg/l	<0.020
Chlorobenzene (TCLP), mg/l	<0.020
Chloroform (TCLP), mg/l	<0.020
1,2-Dichloroethane (TCLP), mg/l	<0.020
1,1-Dichloroethylene (TCLP), mg/l	<0.020
Methyl ethyl ketone (TCLP), mg/l	<0.40
Tetrachloroethylene (TCLP), mg/l	<0.020
Trichloroethylene (TCLP), mg/l	<0.020
Vinyl chloride (TCLP), mg/l	<0.040
Surrogate - Toluene-d	108 %
Surrogate - 4-Bromofluorobenzene	101 %
Surrogate - 1,2-Dichloroethane-d4	114 %
Date Analyzed	11.02.91
TCLP (1311) Sec. 7.2 Extraction Date	10.28.91
TCLP extraction - non-volatile	
Phases	1
% that passes 9.5 mm sieve	100 %
pH (7.1.4.2)	6.8
pH (7.1.4.4)	1.5
Extraction Fluid	1

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SL SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

5102 LaRoche Avenue • Savannah, GA 31404 • (912) 354-7858 • Fax (912) 352-0165

LOG NO: S1-36697A

Received: 22 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, IL
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
36697A-10	LCS Control Limit
36697A-11	LCS % RPD
36697A-12	% RPD Control Limit
36697A-13	Control Limits Source

PARAMETER	36697A-10	36697A-11	36697A-12	36697A-13
Ignitability - Flash Point				
Ignitability-flash point, Degrees F	98-102 %	0 %	<20 %	SL
Sulfide (9030)				
Sulfide (9030)	75-125 %	1.5 %	<30 %	SL
Cyanide (9010A)				
Cyanide, Total	75-125 %	0 %	<30 %	SL

Methods: EPA SW-846.

Methods SW-846-1311 - TCLP results which are above the quantitation limit have been corrected for analytical bias per instructions in Section 8.2.5 of Method 1311 (Federal Register, June 29, 1990). The first number reported is the corrected TCLP value (used to determine if the sample is hazardous) and the value in parenthesis ( ) is the uncorrected analytical result.

*F6 - The physical characteristics (hard, semi-solid) of the sample prohibited continual stirring required by the Pensky-Martens Method. Therefore, the sample was heated without continual stirring and a test flame applied to the sample surface. No apparent ignition of vapors over the sample was observed.

Janette D. Long

Janette D. Long

SL SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

5102 LaRoche Avenue • Savannah, GA 31404 • (912) 354-7858 • Fax (912) 352-0165

D169

LOG NO: S1-36697A

Received: 22 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, IL
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
36697A-5	Detection Limits - Soil
36697A-6	Method Blank (Extraction) Result
36697A-7	Lab Control Standard (LCS) Result/Duplicate
36697A-8	LCS Expected Value
36697A-9	LCS % Recovery/Duplicate

PARAMETER	36697A-5	36697A-6	36697A-7	36697A-8	36697A-9
Ignitability - Flash Point					
Ignitability-flash point, Degrees F	---	>140	81.4/81.4	81.0	100/100 %
Date Analyzed	---	10.29.91	10.29.91	---	---
Sulfide (9030)					
Sulfide (9030) , mg/kg dw	2.5	<2.5	6.00/6.09	6.25	96/97 %
Date Analyzed	---	10.28.91	10.28.91	---	---
Cyanide (9010A)					
Cyanide, Total, mg/kg dw	1.0	<1.0	12.0/12.2	12.5	103/103 %
Date Analyzed	---	10.28.91	10.28.91	---	---

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LOG NO: S1-36697A

Received: 22 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, IL
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
36697A-4	PC,PD,PE (Profiles C,D,E)	10-21-91

PARAMETER	36697A-4
Ignitability - Flash Point	
Ignitability-flash point, Degrees F	*F6
Date Analyzed	10.29.91
Sulfide (9030)	
Sulfide (9030) , mg/kg dw	<3.8
Date Analyzed	10.28.91
Cyanide (9010A)	
Cyanide, Total, mg/kg dw	<1.5
Date Analyzed	10.28.91
Percent Solids, %	66
pH in Soil (9045)	
pH, units	6.6
Date Analyzed	10.25.91

SL SAVANNAH LABORATORIES
& ENVIRONMENTAL SERVICES, INC.

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D171

LOG NO: S1-36697A

Received: 22 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, IL
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
36697A-3	Matrix Spike GML1 3-8' (S1-36621) (% Recovery)

PARAMETER	36697A-3
Mercury (7470)	
Mercury (TCLP)	121 %
Date Analyzed	10.28.91
TCLP (1311) Sec. 7.2 Extraction Date	10.22.91

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5102 LaRoche Avenue • Savannah, GA 31404 • (912) 354-7858 • Fax (912) 352-0165

LOG NO: S1-36697A

Received: 22 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, IL
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
36697A-3	Matrix Spike GML1 3-8' (S1-36621) (% Recovery)

PARAMETER	36697A-3
Pesticides in TCLP extract	
Endrin (TCLP)	143 %
Heptachlor (TCLP)	130 %
Heptachlor epoxide (TCLP)	115 %
Lindane (g-BHC) (TCLP)	138 %
Methoxychlor (TCLP)	133 %
Surrogate-DBC	116 %
Date Analyzed	10.24.91
TCLP (1311) Sec. 7.2 Extraction Date	10.22.91
Date Extracted	10.25.91
Herbicides in TCLP	
2,4-D (TCLP)	70 %
2,4,5-TP Silvex (TCLP)	100 %
Date Analyzed	10.25.91
TCLP (1311) Sec. 7.2 Extraction Date	10.22.91
Date Extracted	10.24.91
Metals in TCLP (6010)	
Arsenic (TCLP)	<0.20
Barium (TCLP)	<1.0
Cadmium (TCLP)	<0.010
Chromium (TCLP)	<0.050
Lead (TCLP)	<0.20
Selenium (TCLP)	<0.50
Silver (TCLP)	<0.010
Date Analyzed	10.28.91
TCLP (1311) Sec. 7.2 Extraction Date	10.22.91

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5102 LaRoche Avenue • Savannah, GA 31404 • (912) 354-7858 • Fax (912) 352-0165

D173

LOG NO: S1-36697A

Received: 22 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, IL
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
36697A-3	Matrix Spike GML1 3-8' (S1-36621) (% Recovery)

PARAMETER	36697A-3
Semivolatiles in TCLP Extract	
1,4-Dichlorobenzene (TCLP)	81 %
2,4-Dinitrotoluene (TCLP)	98 %
Hexachlorobenzene (TCLP)	96 %
Hexachlorobutadiene (TCLP)	98 %
Hexachloroethane (TCLP)	93 %
Nitrobenzene (TCLP)	102 %
Pentachlorophenol (TCLP)	100 %
2,4,6-Trichlorophenol (TCLP)	100 %
Pyridine (TCLP)	18 %
Cresol (ortho) - TCLP	59 %
Surrogate-PLH	24 %
Surrogate-2FP	40 %
Surrogate-TBP	96 %
Surrogate-NBZ	94 %
Surrogate-2FBP	96 %
Surrogate-TPH	90 %
Date Analyzed	10.28.91
TCLP (1311) Sec. 7.2 Extraction Date	10.22.91
Date Extracted	10.25.91

D174

SL SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

5102 LaRoche Avenue • Savannah, GA 31404 • (912) 354-7858 • Fax (912) 352-0165

LOG NO: S1-36697A

Received: 22 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, IL
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
36697A-3	Matrix Spike GML1 3-8' (S1-36621) (% Recovery)

PARAMETER	36697A-3
Volatiles in TCLP Extract	
Benzene (TCLP)	87 %
Carbon tetrachloride (TCLP)	108 %
Chlorobenzene (TCLP)	87 %
Chloroform (TCLP)	103 %
1,2-Dichloroethane (TCLP)	130 %
1,1-Dichloroethylene (TCLP)	37 %
Methyl ethyl ketone (TCLP)	117 %
Tetrachloroethylene (TCLP)	97 %
Trichloroethylene (TCLP)	90 %
Vinyl chloride (TCLP)	91 %
Surrogate - Toluene-d	102 %
Surrogate - 4-Bromofluorobenzene	96 %
Surrogate - 1,2-Dichloroethane-d4	114 %
TCLP (1311) Sec. 7.2 Extraction Date	10.23.91
Date Analyzed	10.23.91

SL SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

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D175

LOG NO: S1-36697A

Received: 22 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, IL
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
36697A-2	Extract Fluid Method Blank (mg/l)

PARAMETER	36697A-2
Metals in TCLP (6010)	
Arsenic (TCLP), mg/l	104 %
Barium (TCLP), mg/l	95 %
Cadmium (TCLP), mg/l	89 %
Chromium (TCLP), mg/l	85 %
Lead (TCLP), mg/l	92 %
Selenium (TCLP), mg/l	102 %
Silver (TCLP), mg/l	81 %
Date Analyzed	10.28.91
TCLP (1311) Sec. 7.2 Extraction Date	10.22.91
Mercury (7470)	
Mercury (TCLP) , mg/l	<0.020
Date Analyzed	10.28.91
TCLP (1311) Sec. 7.2 Extraction Date	10.22.91

SL SAVANNAH LABORATORIES
& ENVIRONMENTAL SERVICES, INC.

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LOG NO: S1-36697A

Received: 22 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, IL
Sampled By: Client

REPORT OF RESULTS

LOG NO SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES

36697A-2 Extract Fluid Method Blank (mg/l)

PARAMETER	36697A-2
Pesticides in TCLP extract	
Chlordane (TCLP), mg/l	<0.0050
Endrin (TCLP), mg/l	<0.0010
Heptachlor (TCLP), mg/l	<0.00050
Heptachlor epoxide (TCLP), mg/l	<0.00050
Lindane (g-BHC) (TCLP), mg/l	<0.00050
Methoxychlor (TCLP), mg/l	<0.025
Toxaphene (TCLP), mg/l	<0.050
Surrogate-DBC	103 %
Date Analyzed	10.24.91
TCLP (1311) Sec. 7.2 Extraction Date	10.22.91
Date Extracted	10.24.91
Herbicides in TCLP	
2,4-D (TCLP), mg/l	<0.050
2,4,5-TP Silvex (TCLP), mg/l	<0.010
Date Analyzed	10.25.91
TCLP (1311) Sec. 7.2 Extraction Date	10.22.91
Date Extracted	10.24.91

SL SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

5102 LaRoche Avenue • Savannah, GA 31404 • (912) 354-7858 • Fax (912) 352-0165

D177

LOG NO: S1-36697A

Received: 22 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, IL
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
36697A-2	Extract Fluid Method Blank (mg/l)

PARAMETER	36697A-2
Semivolatiles in TCLP Extract	
1,4-Dichlorobenzene (TCLP), mg/l	<0.050
2,4-Dinitrotoluene (TCLP), mg/l	<0.050
Hexachlorobenzene (TCLP), mg/l	<0.050
Hexachlorobutadiene (TCLP), mg/l	<0.050
Hexachloroethane (TCLP), mg/l	<0.050
Nitrobenzene (TCLP), mg/l	<0.050
Pentachlorophenol (TCLP), mg/l	<0.25
2,4,5-Trichlorophenol (TCLP), mg/l	<0.25
2,4,6-Trichlorophenol (TCLP), mg/l	<0.050
Pyridine (TCLP), mg/l	<0.25
Cresol (ortho) - TCLP, mg/l	<0.050
Cresol m & p - TCLP, mg/l	<0.050
Surrogate-PLH	29 %
Surrogate-2FP	48 %
Surrogate-TBP	95 %
Surrogate-NBZ	93 %
Surrogate-2FBP	86 %
Surrogate-TPH	125 %
Date Analyzed	10.28.91
TCLP (1311) Sec. 7.2 Extraction Date	10.22.91
Date Extracted	10.25.91

D178

SL SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

5102 LaRoche Avenue • Savannah, GA 31404 • (912) 354-7858 • Fax (912) 352-0165

LOG NO: S1-36697A

Received: 22 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, IL
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
36697A-2	Extract Fluid Method Blank (mg/l)

PARAMETER	36697A-2
Volatiles in TCLP Extract	
Benzene (TCLP), mg/l	<0.020
Carbon tetrachloride (TCLP), mg/l	<0.020
Chlorobenzene (TCLP), mg/l	<0.020
Chloroform (TCLP), mg/l	<0.020
1,2-Dichloroethane (TCLP), mg/l	<0.020
1,1-Dichloroethylene (TCLP), mg/l	<0.020
Methyl ethyl ketone (TCLP), mg/l	<0.40
Tetrachloroethylene (TCLP), mg/l	<0.020
Trichloroethylene (TCLP), mg/l	<0.020
Vinyl chloride (TCLP), mg/l	<0.040
Surrogate - Toluene-d	103 %
Surrogate - 4-Bromofluorobenzene	115 %
Surrogate - 1,2-Dichloroethane-d4	111 %
TCLP (1311) Sec. 7.2 Extraction Date	10.23.91
Date Analyzed	10.30.91

SL SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

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D179

LOG NO: S1-36697A

Received: 22 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, IL
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
36697A-1	PC,PD,PE (Profiles C,D,E)	10-21-91

PARAMETER	36697A-1
Metals in TCLP (6010)	
Arsenic (TCLP), mg/l	<0.20
Barium (TCLP), mg/l	1.9(1.8)
Cadmium (TCLP), mg/l	0.13(0.12)
Chromium (TCLP), mg/l	<0.050
Lead (TCLP), mg/l	<0.20
Selenium (TCLP), mg/l	<0.50
Silver (TCLP), mg/l	<0.010
Date Analyzed	10.28.91
TCLP (1311) Sec. 7.2 Extraction Date	10.22.91
Mercury (7470)	
Mercury (TCLP) , mg/l	<0.020
Date Analyzed	10.28.91
TCLP (1311) Sec. 7.2 Extraction Date	10.22.91

SL SAVANNAH LABORATORIES
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LOG NO: S1-36697A

Received: 22 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, IL
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
36697A-1	PC,PD,PE (Profiles C,D,E)	10-21-91

PARAMETER	36697A-1
Pesticides in TCLP extract	
Chlordane (TCLP), mg/l	<0.0050
Endrin (TCLP), mg/l	<0.0010
Heptachlor (TCLP), mg/l	<0.00050
Heptachlor epoxide (TCLP), mg/l	<0.00050
Lindane (g-BHC) (TCLP), mg/l	<0.00050
Methoxychlor (TCLP), mg/l	<0.025
Toxaphene (TCLP), mg/l	<0.050
Surrogate-DBC	108 %
Date Analyzed	10.24.91
TCLP (1311) Sec. 7.2 Extraction Date	10.22.91
Date Extracted	10.24.91
Herbicides in TCLP	
2,4-D (TCLP), mg/l	<0.050
2,4,5-TP Silvex (TCLP), mg/l	<0.010
Date Analyzed	10.25.91
TCLP (1311) Sec. 7.2 Extraction Date	10.22.91
Date Extracted	10.24.91

SL SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

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D181

LOG NO: S1-36697A

Received: 22 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, IL
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
36697A-1	PC,PD,PE (Profiles C,D,E)	10-21-91

PARAMETER	36697A-1
Semivolatiles in TCLP Extract	
1,4-Dichlorobenzene (TCLP), mg/l	<0.050
2,4-Dinitrotoluene (TCLP), mg/l	<0.050
Hexachlorobenzene (TCLP), mg/l	<0.050
Hexachlorobutadiene (TCLP), mg/l	<0.050
Hexachloroethane (TCLP), mg/l	<0.050
Nitrobenzene (TCLP), mg/l	<0.050
Pentachlorophenol (TCLP), mg/l	<0.25
2,4,5-Trichlorophenol (TCLP), mg/l	<0.25
2,4,6-Trichlorophenol (TCLP), mg/l	<0.050
Pyridine (TCLP), mg/l	<0.25
Cresol (ortho) - TCLP, mg/l	<0.050
Cresol m & p - TCLP, mg/l	<0.050
Surrogate-PLH	27 %
Surrogate-2FP	39 %
Surrogate-TBP	83 %
Surrogate-NBZ	91 %
Surrogate-2FBP	87 %
Surrogate-TPH	77 %
Date Analyzed	10.28.91
TCLP (1311) Sec. 7.2 Extraction Date	10.22.91
Date Extracted	10.25.91

D182

SL SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

5102 LaRoche Avenue • Savannah, GA 31404 • (912) 354-7858 • Fax (912) 352-0165

LOG NO: S1-36697A

Received: 22 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, IL
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
36697A-1	PC,PD,PE (Profiles C,D,E)	10-21-91

PARAMETER	36697A-1
TCLP extraction volatiles ZHE	
Phases	1
% that passes 9.5 mm sieve	100 %
Volatiles in TCLP Extract	
Benzene (TCLP), mg/l	<0.020
Carbon tetrachloride (TCLP), mg/l	<0.020
Chlorobenzene (TCLP), mg/l	<0.020
Chloroform (TCLP), mg/l	<0.020
1,2-Dichloroethane (TCLP), mg/l	<0.020
1,1-Dichloroethylene (TCLP), mg/l	<0.020
Methyl ethyl ketone (TCLP), mg/l	<0.40
Tetrachloroethylene (TCLP), mg/l	<0.020
Trichloroethylene (TCLP), mg/l	<0.020
Vinyl chloride (TCLP), mg/l	<0.040
Surrogate - Toluene-d	107 %
Surrogate - 4-Bromofluorobenzene	113 %
Surrogate - 1,2-Dichloroethane-d4	114 %
TCLP (1311) Sec. 7.2 Extraction Date	10.23.91
Date Analyzed	10.30.91
TCLP extraction - non-volatile	
Phases	1
% that passes 9.5 mm sieve	100 %
pH (7.1.4.2)	6.9
pH (7.1.4.4)	1.7
Extraction Fluid	1

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D183

LOG NO: S1-36674A

Received: 19 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, ILL
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
36674A-13	Matrix Spike (GML1 3-8')(% Recovery)

PARAMETER	36674A-13
Mercury (7470)	
Mercury (TCLP)	121 %
Date Analyzed	10.28.91
Date Extracted	10.21.91

Methods: EPA SW-846.

Methods SW-846-1311 - TCLP results which are above the quantitation limit have been corrected for analytical bias per instructions in Section 8.2.5 of Method 1311 (Federal Register, June 29, 1990). The first number reported is the corrected TCLP value (used to determine if the sample is hazardous) and the value in parenthesis ( ) is the uncorrected analytical result.

*F6 - The physical characteristics (hard,semisolid) of the sample prohibited continual stirring required by the Pensky-Martens Method. Therefore, the sample was heated without continual stirring and a test flame applied to the sample surface. No apparent ignition of vapors over the sample was observed.

Janette D. Long

Janette D. Long

D184

SL SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

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LOG NO: S1-36674A

Received: 19 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, ILL
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
36674A-13	Matrix Spike (GML1 3-8') (% Recovery)

PARAMETER	36674A-13
Pesticides in TCLP extract	
Endrin (TCLP)	143 %
Heptachlor (TCLP)	130 %
Heptachlor epoxide (TCLP)	115 %
Lindane (g-BHC) (TCLP)	138 %
Methoxychlor (TCLP)	133 %
Surrogate-DBC	116 %
Date Analyzed	10.24.91
TCLP (1311) Sec. 7.2 Extraction Date	10.21.91
Date Extracted	10.24.91
Herbicides in TCLP	
2,4-D (TCLP)	70 %
2,4,5-TP Silvex (TCLP)	100 %
Date Analyzed	10.25.91
TCLP (1311) Sec. 7.2 Extraction Date	10.21.91
Date Extracted	10.24.91
Metals in TCLP (6010)	
Arsenic (TCLP)	104 %
Barium (TCLP)	95 %
Cadmium (TCLP)	89 %
Chromium (TCLP)	85 %
Lead (TCLP)	92 %
Selenium (TCLP)	102 %
Silver (TCLP)	81 %
Date Analyzed	10.28.91
Date Extracted	10.21.91

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D185

LOG NO: S1-36674A

Received: 19 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, ILL
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
36674A-13	Matrix Spike (GML1 3-8')(% Recovery)

PARAMETER	36674A-13
Semivolatiles in TCLP Extract	
1,4-Dichlorobenzene (TCLP)	81 %
2,4-Dinitrotoluene (TCLP)	98 %
Hexachlorobenzene (TCLP)	96 %
Hexachlorobutadiene (TCLP)	98 %
Hexachloroethane (TCLP)	93 %
Nitrobenzene (TCLP)	102 %
Pentachlorophenol (TCLP)	100 %
2,4,6-Trichlorophenol (TCLP)	100 %
Pyridine (TCLP)	18 %
Cresol (ortho) - TCLP,	59 %
Surrogate-PLH	24 %
Surrogate-2FP	40 %
Surrogate-TBP	96 %
Surrogate-NBZ	94 %
Surrogate-2FBP	96 %
Surrogate-TPH	90 %
Date Analyzed	10.28.91
TCLP (1311) Sec. 7.2 Extraction Date	10.21.91
Date Extracted	10.25.91

D186

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LOG NO: S1-36674A

Received: 19 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, ILL
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
36674A-13	Matrix Spike (GML1 3-8') (% Recovery)

PARAMETER	36674A-13
Volatiles in TCLP Extract	
Benzene (TCLP)	87 %
Carbon tetrachloride (TCLP)	108 %
Chlorobenzene (TCLP)	87 %
Chloroform (TCLP)	103 %
1,2-Dichloroethane (TCLP)	130 %
1,1-Dichloroethylene (TCLP)	37 %
Methyl ethyl ketone (TCLP)	117 %
Tetrachloroethylene (TCLP)	97 %
Trichloroethylene (TCLP)	90 %
Vinyl chloride (TCLP)	91 %
Surrogate - Toluene-d	102 %
Surrogate - 4-Bromofluorobenzene	96 %
Surrogate - 1,2-Dichloroethane-d4	114 %
TCLP (1311) Sec. 7.2 Extraction Date	10.23.91
Date Analyzed	10.23.91

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D187

LOG NO: S1-36674A

Received: 19 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, ILL
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
36674A-12	Extract Fluid Method Blank (mg/l)

PARAMETER	36674A-12
Metals in TCLP (6010)	
Arsenic (TCLP), mg/l	<0.20
Barium (TCLP), mg/l	<1.0
Cadmium (TCLP), mg/l	<0.010
Chromium (TCLP), mg/l	<0.050
Lead (TCLP), mg/l	<0.20
Selenium (TCLP), mg/l	<1.0
Silver (TCLP), mg/l	<0.010
Date Analyzed	10.28.91
TCLP (1311) Sec. 7.2 Extraction Date	10.21.91
Mercury (7470)	
Mercury (TCLP) , mg/l	<0.020
Date Analyzed	10.28.91
TCLP (1311) Sec. 7.2 Extraction Date	10.21.91

D188

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LOG NO: S1-36674A

Received: 19 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, ILL
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
36674A-12	Extract Fluid Method Blank (mg/l)

PARAMETER	36674A-12
Pesticides in TCLP extract	
Chlordane (TCLP), mg/l	<0.0050
Endrin (TCLP), mg/l	<0.0010
Heptachlor (TCLP), mg/l	<0.00050
Heptachlor epoxide (TCLP), mg/l	<0.00050
Lindane (g-BHC) (TCLP), mg/l	<0.00050
Methoxychlor (TCLP), mg/l	<0.025
Toxaphene (TCLP), mg/l	<0.050
Surrogate-DBC	103 %
Date Analyzed	10.24.91
TCLP (1311) Sec. 7.2 Extraction Date	10.21.91
Date Extracted	10.24.91
Herbicides in TCLP	
2,4-D (TCLP), mg/l	<0.050
2,4,5-TP Silvex (TCLP), mg/l	<0.010
Date Analyzed	10.24.91
TCLP (1311) Sec. 7.2 Extraction Date	10.21.91

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D189

LOG NO: S1-36674A

Received: 19 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, ILL
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
36674A-12	Extract Fluid Method Blank (mg/l)

PARAMETER	36674A-12
Semivolatiles in TCLP Extract	
1,4-Dichlorobenzene (TCLP), mg/l	<0.050
2,4-Dinitrotoluene (TCLP), mg/l	<0.050
Hexachlorobenzene (TCLP), mg/l	<0.050
Hexachlorobutadiene (TCLP), mg/l	<0.050
Hexachloroethane (TCLP), mg/l	<0.050
Nitrobenzene (TCLP), mg/l	<0.050
Pentachlorophenol (TCLP), mg/l	<0.25
2,4,5-Trichlorophenol (TCLP), mg/l	<0.25
2,4,6-Trichlorophenol (TCLP), mg/l	<0.050
Pyridine (TCLP), mg/l	<0.25
Cresol (ortho) - TCLP, mg/l	<0.050
Cresol m & p - TCLP, mg/l	<0.050
Surrogate-PLH	29 %
Surrogate-2FP	48 %
Surrogate-TBP	95 %
Surrogate-NBZ	93 %
Surrogate-2FBP	86 %
Surrogate-TPH	125 %
Date Analyzed	10.28.91
TCLP (1311) Sec. 7.2 Extraction Date	10.21.91
Date Extracted	10.25.91

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LOG NO: S1-36674A

Received: 19 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, ILL
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
36674A-12	Extract Fluid Method Blank (mg/l)

PARAMETER	36674A-12
Volatiles in TCLP Extract	
Benzene (TCLP), mg/l	<0.020
Carbon tetrachloride (TCLP), mg/l	<0.020
Chlorobenzene (TCLP), mg/l	<0.020
Chloroform (TCLP), mg/l	<0.020
1,2-Dichloroethane (TCLP), mg/l	<0.020
1,1-Dichloroethylene (TCLP), mg/l	<0.020
Methyl ethyl ketone (TCLP), mg/l	<0.40
Tetrachloroethylene (TCLP), mg/l	<0.020
Trichloroethylene (TCLP), mg/l	<0.020
Vinyl chloride (TCLP), mg/l	<0.040
Surrogate - Toluene-d	106 %
Surrogate - 4-Bromofluorobenzene	113 %
Surrogate - 1,2-Dichloroethane-d4	109 %
TCLP (1311) Sec. 7.2 Extraction Date	10.23.91
Date Analyzed	10.28.91

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D19 1

LOG NO: S1-36674A

Received: 19 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, ILL
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
36674A-11	PA and PB	10-18-91

PARAMETER	36674A-11
Metals in TCLP (6010)	
Arsenic (TCLP), mg/l	<0.20
Barium (TCLP), mg/l	1.9(1.8)
Cadmium (TCLP), mg/l	.083(.074)
Chromium (TCLP), mg/l	<0.050
Lead (TCLP), mg/l	<0.20
Selenium (TCLP), mg/l	<0.50
Silver (TCLP), mg/l	<0.010
Date Analyzed	10.28.91
Date Extracted	10.21.91
Mercury (7470)	
Mercury (TCLP) , mg/l	<0.020
Date Analyzed	10.28.91
Date Extracted	10.21.91

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SL SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

5102 LaRoche Avenue • Savannah, GA 31404 • (912) 354-7858 • Fax (912) 352-0165

LOG NO: S1-36674A

Received: 19 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, ILL
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
36674A-11	PA and PB	10-18-91

PARAMETER	36674A-11
Pesticides in TCLP extract	
Chlordane (TCLP), mg/l	<0.0050
Endrin (TCLP), mg/l	<0.0010
Heptachlor (TCLP), mg/l	<0.00050
Heptachlor epoxide (TCLP), mg/l	<0.00050
Lindane (g-BHC) (TCLP), mg/l	<0.00050
Methoxychlor (TCLP), mg/l	<0.025
Toxaphene (TCLP), mg/l	<0.050
Surrogate-DBC	115 %
Date Analyzed	10.24.91
TCLP (1311) Sec. 7.2 Extraction Date	10.21.91
Date Extracted	10.24.91
Herbicides in TCLP	
2,4-D (TCLP), mg/l	<0.050
2,4,5-TP Silvex (TCLP), mg/l	<0.010
Date Analyzed	10.25.91
TCLP (1311) Sec. 7.2 Extraction Date	10.21.91
Date Extracted	10.24.91

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D193

LOG NO: S1-36674A

Received: 19 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, ILL
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
36674A-11	PA and PB	10-18-91

PARAMETER	36674A-11
Semivolatiles in TCLP Extract	
1,4-Dichlorobenzene (TCLP), mg/l	<0.050
2,4-Dinitrotoluene (TCLP), mg/l	<0.050
Hexachlorobenzene (TCLP), mg/l	<0.050
Hexachlorobutadiene (TCLP), mg/l	<0.050
Hexachloroethane (TCLP), mg/l	<0.050
Nitrobenzene (TCLP), mg/l	<0.050
Pentachlorophenol (TCLP), mg/l	<0.25
2,4,5-Trichlorophenol (TCLP), mg/l	<0.25
2,4,6-Trichlorophenol (TCLP), mg/l	<0.050
Pyridine (TCLP), mg/l	<0.25
Cresol (ortho) - TCLP, mg/l	<0.050
Cresol m & p - TCLP, mg/l	<0.050
Surrogate-PLH	15 %
Surrogate-2FP	5.0 %
Surrogate-TBP	12 %
Surrogate-NBZ	91 %
Surrogate-2FBP	79 %
Surrogate-TPH	86 %
Date Analyzed	10.28.91
TCLP (1311) Sec. 7.2 Extraction Date	10.21.91
Date Extracted	10.25.91

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D194

LOG NO: S1-36674A

Received: 19 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, ILL
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
36674A-11	PA and PB	10-18-91

PARAMETER	36674A-11
TCLP extraction volatiles ZHE	
Phases	1
% that passes 9.5 mm sieve	100 %
Volatiles in TCLP Extract	
Benzene (TCLP), mg/l	<0.020
Carbon tetrachloride (TCLP), mg/l	<0.020
Chlorobenzene (TCLP), mg/l	.053(.053)
Chloroform (TCLP), mg/l	<0.020
1,2-Dichloroethane (TCLP), mg/l	<0.020
1,1-Dichloroethylene (TCLP), mg/l	<0.020
Methyl ethyl ketone (TCLP), mg/l	<0.40
Tetrachloroethylene (TCLP), mg/l	<0.020
Trichloroethylene (TCLP), mg/l	<0.020
Vinyl chloride (TCLP), mg/l	<0.040
Surrogate - Toluene-d	104 %
Surrogate - 4-Bromofluorobenzene	115 %
Surrogate - 1,2-Dichloroethane-d4	114 %
TCLP (1311) Sec. 7.2 Extraction Date	10.23.91
Date Analyzed	10.28.91
TCLP extraction - non-volatile	
Phases	1
% that passes 9.5 mm sieve	100 %
pH (7.1.4.2)	5.6
pH (7.1.4.4)	1.4
Extraction Fluid	1

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D195

LOG NO: S1-36674A

Received: 19 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, ILL
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
36674A-7	LCS Control Limit
36674A-8	LCS % RPD
36674A-9	% RPD Control Limit
36674A-10	Control Limits Source

PARAMETER	36674A-7	36674A-8	36674A-9	36674A-10
Ignitability - Flash Point				
Ignitability-flash point, Degrees F	98-102 %	0 %	<20 %	SL
Sulfide (9030)				
Sulfide (9030)	75-125 %	0.88 %	<30 %	SL
Cyanide (9010A)				
Cyanide, Total	75-125 %	1.9 %	<30 %	SL

D196

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LOG NO: S1-36674A

Received: 19 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, ILL
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
36674A-2	Detection Limits - Soil
36674A-3	Method Blank (Extraction) Result
36674A-4	Lab Control Standard (LCS) Result/Duplic ate
36674A-5	LCS Expected Value
36674A-6	LCS % Recovery/Duplicate

PARAMETER	36674A-2	36674A-3	36674A-4	36674A-5	36674A-6
Ignitability - Flash Point					
Ignitability-flash point, Degrees F	---	>140	81.4/81.4	81.0	100/100 %
Date Analyzed	---	10.29.91	10.29.91	---	---
Sulfide (9030)					
Sulfide (9030) , mg/kg dw	2.5	<2.5	11.3/11.4	12.5	90/91 %
Date Analyzed	---	10.22.91	10.22.91	---	---
Cyanide (9010A)					
Cyanide, Total, mg/kg dw	1.0	<1.0	4.1/4.2	4.0	103/105 %
Date Analyzed	---	10.26.91	10.26.91	---	---

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D197

LOG NO: S1-36674A

Received: 19 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: LTO# 06490/Dead Creek/Sauget, ILL
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
36674A-1	PA and PB	10-18-91

PARAMETER	36674A-1
Ignitability - Flash Point	
Ignitability-flash point, Degrees F	*F6
Date Analyzed	10.29.91
Sulfide (9030)	
Sulfide (9030) , mg/kg dw	16
Date Analyzed	10.22.91
Cyanide (9010A)	
Cyanide, Total, mg/kg dw	<1.5
Date Analyzed	10.26.91
Percent Solids, %	65
pH in Soil (9045)	
pH-soil (9045), units	6.3
Date Analyzed	10.25.91

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& ENVIRONMENTAL SERVICES, INC.

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D198

LOG NO: S2-40122

Received: 09 JAN 92

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS05/NY60505/DEAD CREEK
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
40122-4	Method Blank - Liquid
40122-5	% RPD for MS

PARAMETER	40122-4	40122-5
Lead (7421)		
Lead, ug/l	<5.0	1.1 %
% R Post Digestion Spike (CL 75-125 %)	77 %	---
Date Analyzed	01.14.92	---
Selenium (7740)		
Selenium, ug/l	<10	1.9 %
% R Post Digestion Spike (CL 75-125 %)	102 %	---
Date Analyzed	01.13.92	---
Arsenic (7060)		
Arsenic, ug/l	<10	0.86 %
% R Post Digestion Spike (CL 75-125 %)	112 %	---
Date Analyzed	01.13.92	---
Thallium (7481)		
Thallium, ug/l	<10	0 %
% R Post Digestion Spike (CL 75-125 %)	77 %	---
Date Analyzed	01.14.92	---
Total Cyanide (9010A)		
Cyanide, Total, ug/l	<10	1.1 %
Date Analyzed	01.13.92	---

SDG# GMS05

*F5 - Post digestion spike for furnace AA analysis exceeds control limits (75-125%) while sample absorbance is less than 50% of spike absorbance.
*F65 - Elevated detection limits were reported due to sample matrix interference which required sample dilution prior to analysis.

J. W. Andrews

J. W. Andrews, Ph. D.

SL SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

5102 LaRoche Avenue • Savannah, GA 31404 • (912) 354-7858 • Fax (912) 352-0165

D199

LOG NO: S2-40122

Received: 09 JAN 92

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS05/NY60505/DEAD CREEK
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
40122-4	Method Blank - Liquid
40122-5	% RPD for MS

PARAMETER	40122-4	40122-5
Metals (6010)		
Aluminum, ug/l	<200	0 %
Antimony, ug/l	<50	0 %
Barium, ug/l	<10	0 %
Beryllium, ug/l	<5.0	0.98 %
Cadmium, ug/l	<5.0	0.94 %
Calcium, ug/l	<50	3.6 %
Chromium, ug/l	<10	0 %
Cobalt, ug/l	<10	0 %
Copper, ug/l	<25	0.94 %
Iron, ug/l	<50	1.0 %
Magnesium, ug/l	<50	0.99 %
Manganese, ug/l	<10	0.93 %
Nickel, ug/l	<40	0 %
Potassium, ug/l	<1000	0 %
Silver, ug/l	<10	0 %
Sodium , ug/l	<50	0 %
Vanadium, ug/l	<10	0 %
Zinc, ug/l	<20	0 %
Interference Check Sample .	PASSED	---
Dilution Check Sample	PASSED	---
Date Analyzed	01.13.92	---
Mercury (7470)		
Mercury , ug/l	<0.20	1.1 %
Date Analyzed	01.13.92	---

D200

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LOG NO: S2-40122

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Mr. Brian Blum
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Plainview, NY 11803

Project: SDG#GMS05/NY60505/DEAD CREEK
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
40122-4	Method Blank - Liquid
40122-5	% RPD for MS

PARAMETER	40122-4	40122-5
Aroclor-1232, ug/l	<0.50	---
Aroclor-1242, ug/l	<0.50	---
Aroclor-1248, ug/l	<0.50	---
Aroclor-1254, ug/l	<0.50	---
Aroclor-1260, ug/l	<0.50	---
Surrogate-DBC	73 %	---
Date Extracted	01.13.92	---
Date Analyzed	01.16.92	---

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125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS05/NY60505/DEAD CREEK
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
40122-4	Method Blank - Liquid
40122-5	% RPD for MS

PARAMETER	40122-4	40122-5
TCL Pesticides		
alpha-BHC, ug/l	<0.010	---
beta-BHC, ug/l	<0.010	---
delta-BHC, ug/l	<0.010	---
gamma-BHC, ug/l	<0.010	5.8 %
Heptachlor, ug/l	<0.010	4.5 %
Aldrin, ug/l	<0.010	3.0 %
Heptachlor epoxide, ug/l	<0.020	---
Endosulfan I, ug/l	<0.020	---
Dieldrin, ug/l	<0.020	4.1 %
4,4'-DDE, ug/l	<0.020	---
Endrin, ug/l	<0.020	5.2 %
Endosulfan II, ug/l	<0.050	---
4,4'-DDD, ug/l	<0.050	---
Endosulfan sulfate, ug/l	<0.10	---
4,4'-DDT, ug/l	<0.050	5.4 %
Endrin ketone, ug/l	<0.10	---
Methoxychlor, ug/l	<0.50	---
alpha-Chlordane, ug/l	<0.010	---
gamma-Chlordane, ug/l	<0.010	---
Toxaphene, ug/l	<1.0	---
Aroclor-1016, ug/l	<0.50	---
Aroclor-1221, ug/l	<0.50	---

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LOG NO: S2-40122

Received: 09 JAN 92

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS05/NY60505/DEAD CREEK
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
40122-4	Method Blank - Liquid
40122-5	% RPD for MS

PARAMETER	40122-4	40122-5
4-Bromophenyl-phenyl-ether, ug/l	<10	---
Hexachlorobenzene, ug/l	<10	---
Pentachlorophenol, ug/l	<50	10 %
Phenanthrene, ug/l	<10	---
Anthracene, ug/l	<10	---
Di-n-butylphthalate, ug/l	<10	---
Fluoranthene, ug/l	<10	---
Pyrene, ug/l	<10	3.2 %
Butylbenzylphthalate, ug/l	<10	---
3,3'-Dichlorobenzidine, ug/l	<20	---
Benzo(a)anthracene, ug/l	<10	---
bis(2-Ethylhexyl) phthalate, ug/l	<10	---
Chrysene, ug/l	<10	---
Di-n-octylphthalate, ug/l	<10	---
Benzo(b)fluoranthene, ug/l	<10	---
Benzo(k)fluoranthene, ug/l	<10	---
Benzo(a)pyrene, ug/l	<10	---
Indeno (1,2,3-cd)pyrene, ug/l	<10	---
Dibenzo(a,h)anthracene, ug/l	<10	---
Benzo(g,h,i)perylene, ug/l	<10	---
Surrogate-NBZ (CL 35-114)	81 %	---
Surrogate-FBP (CL 43-116)	87 %	---
Surrogate-TPH (CL 33-141)	97 %	---
Surrogate-PHL (CL 10-110)	74 %	---
Surrogate-2FP (CL 21-110)	79 %	---
Surrogate-TBP (CL 10-123)	68 %	---
Date Extracted	01.12.92	---
Date Analyzed	01.17.92	---

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LOG NO: S2-40122

Received: 09 JAN 92

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS05/NY60505/DEAD CREEK
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
40122-4	Method Blank - Liquid
40122-5	% RPD for MS

PARAMETER	40122-4	40122-5
Hexachlorobutadiene, ug/l	<10	---
4-Chloro-3-methylphenol, ug/l	<10	0 %
2-Methylnaphthalene, ug/l	<10	---
Hexachlorocyclopentadiene, ug/l	<10	---
2,4,6-Trichlorophenol, ug/l	<10	---
2,4,5-Trichlorophenol, ug/l	<10	---
2-Chloronaphthalene, ug/l	<10	---
2-Nitroaniline, ug/l	<50	---
Dimethylphthalate, ug/l	<10	---
Acenaphthylene, ug/l	<10	---
3-Nitroaniline, ug/l	<50	---
Acenaphthene, ug/l	<10	1.1 %
2,4-Dinitrophenol, ug/l	<50	---
4-Nitrophenol, ug/l	<50	6.1 %
Dibenzofuran, ug/l	<10	---
2,4-Dinitrotoluene, ug/l	<10	7.5 %
2,6-Dinitrotoluene, ug/l	<10	---
Diethylphthalate, ug/l	<10	---
4-Chlorophenyl-phenyl ether, ug/l	<10	---
Fluorene, ug/l	<10	---
4-Nitroaniline, ug/l	<50	---
4,6-Dinitro-2-methylphenol, ug/l	<50	---
N-Nitrosodiphenylamine/Diphenylamine, ug/l	<10	---

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LOG NO: S2-40122

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125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS05/NY60505/DEAD CREEK
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
40122-4	Method Blank - Liquid
40122-5	% RPD for MS

PARAMETER	40122-4	40122-5
TCL Semivolatiles (8270)		
Phenol, ug/l	<10	2.5 %
bis(2-Chloroethyl) ether, ug/l	<10	---
2-Chlorophenol, ug/l	<10	3.5 %
1,3-Dichlorobenzene, ug/l	<10	---
1,4-Dichlorobenzene, ug/l	<10	0 %
Benzyl alcohol, ug/l	<10	---
1,2-Dichlorobenzene, ug/l	<10	---
2-Methylphenol (o-cresol), ug/l	<10	---
Bis(2-chloroisopropyl)ether, ug/l	<10	---
4-Methylphenol (p-cresol), ug/l	<10	---
N-Nitroso-di-n-propylamine, ug/l	<10	5.1 %
Hexachloroethane, ug/l	<10	---
Nitrobenzene, ug/l	<10	---
Isophorone, ug/l	<10	---
2-Nitrophenol, ug/l	<10	---
2,4-Dimethylphenol, ug/l	<10	---
Benzoic acid, ug/l	<50	---
bis(2-Chloroethoxy) methane, ug/l	<10	---
2,4-Dichlorophenol, ug/l	<10	---
1,2,4-Trichlorobenzene, ug/l	<10	0 %
Naphthalene, ug/l	<10	---
4-Chloroaniline, ug/l	<10	---

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LOG NO: S2-40122

Received: 09 JAN 92

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS05/NY60505/DEAD CREEK
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
40122-4	Method Blank - Liquid
40122-5	% RPD for MS

PARAMETER	40122-4	40122-5
1,1,2-Trichloroethane, ug/l	<5.0	---
Benzene, ug/l	<5.0	9.7 %
Cis-1,3-Dichloropropene, ug/l	<5.0	---
Bromoform, ug/l	<5.0	---
2-Hexanone, ug/l	<50	---
4-Methyl-2-pentanone, ug/l	<50	---
Tetrachloroethene, ug/l	<5.0	---
Toluene, ug/l	<5.0	8.4 %
Chlorobenzene, ug/l	<5.0	6.1 %
Ethylbenzene, ug/l	<5.0	---
Styrene, ug/l	<5.0	---
Xylenes, ug/l	<5.0	---
Surrogate - Toluene-d	96 %	---
Surrogate - 4-Bromofluorobenzene	111 %	---
Surrogate - 1,2-Dichloroethane-d4	86 %	---
Date Analyzed	01.10.92	---

D206

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LOG NO: S2-40122

Received: 09 JAN 92

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125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS05/NY60505/DEAD CREEK
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
40122-4	Method Blank - Liquid
40122-5	% RPD for MS

PARAMETER	40122-4	40122-5
Volatiles by GC/MS		
Chloromethane, ug/l	<10	---
Bromomethane, ug/l	<10	---
Vinyl Chloride, ug/l	<10	---
Chloroethane, ug/l	<10	---
Methylene Chloride, ug/l	<5.0	---
Acetone, ug/l	<100	---
Carbon Disulfide, ug/l	<5.0	---
1,1-Dichloroethene, ug/l	<5.0	8.6 %
1,1-Dichloroethane, ug/l	<5.0	---
cis/trans-1,2-Dichloroethene, ug/l	<5.0	---
Chloroform, ug/l	<5.0	---
1,2-Dichloroethane, ug/l	<5.0	---
2-Butanone, ug/l	<100	---
1,1,1-Trichloroethane, ug/l	<5.0	---
Carbon Tetrachloride, ug/l	<5.0	---
Vinyl Acetate, ug/l	<50	---
Bromodichloromethane, ug/l	<5.0	---
1,1,2,2-Tetrachloroethane, ug/l	<5.0	---
1,2-Dichloropropane, ug/l	<5.0	---
Trans-1,3-Dichloropropene, ug/l	<5.0	---
Trichloroethene, ug/l	<5.0	11 %
Dibromochloromethane, ug/l	<5.0	---

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D207

LOG NO: S2-40122

Received: 09 JAN 92

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS05/NY60505/DEAD CREEK
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
40122-2	LCS (% Recovery)
40122-3	LCS Duplicate (% Recovery)

PARAMETER	40122-2	40122-3
Lead (7421)		
Lead	87 %	88 %
Date Analyzed	01.14.92	01.14.92
Selenium (7740)		
Selenium	107 %	109 %
Date Analyzed	01.13.92	01.13.92
Arsenic (7060)		
Arsenic	115 %	116 %
Date Analyzed	01.13.92	01.13.92
Thallium (7481)		
Thallium	89 %	89 %
Date Analyzed	01.14.92	01.14.92
Cyanide (9010)		
Cyanide, Total	94 %	95 %
Date Analyzed	01.13.92	01.13.92

D268

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LOG NO: S2-40122

Received: 09 JAN 92

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Plainview, NY 11803

Project: SDG#GMS05/NY60505/DEAD CREEK
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
40122-2	LCS (% Recovery)
40122-3	LCS Duplicate (% Recovery)

PARAMETER	40122-2	40122-3
Metals (6010)		
Aluminum	103 %	103 %
Antimony	100 %	100 %
Barium	105 %	105 %
Beryllium	102 %	103 %
Cadmium	106 %	107 %
Calcium	108 %	112 %
Chromium	108 %	108 %
Cobalt	109 %	109 %
Copper	106 %	107 %
Iron	97 %	98 %
Magnesium	101 %	102 %
Manganese	107 %	108 %
Nickel	109 %	109 %
Potassium	104 %	104 %
Silver	98 %	98 %
Sodium	106 %	106 %
Vanadium	108 %	108 %
Zinc	109 %	109 %
Interference Check Sample	PASSED	PASSED
Dilution Check Sample	PASSED	PASSED
Date Analyzed	01.13.92	01.13.92
Mercury (7470)		
Mercury	91 %	92 %
Date Analyzed	01.13.92	01.13.92

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D209

LOG NO: S2-40122

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Plainview, NY 11803

Project: SDG#GMS05/NY60505/DEAD CREEK
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
40122-2	LCS (% Recovery)
40122-3	LCS Duplicate (% Recovery)

PARAMETER	40122-2	40122-3
TCL Pesticides		
gamma-BHC	67 %	71 %
Heptachlor	65 %	68 %
Aldrin	65 %	67 %
Dieldrin	72 %	75 %
Endrin	75 %	79 %
4,4'-DDT	72 %	76 %
Surrogate-DBC	73 %	75 %
Date Extracted	01.13.92	01.13.92
Date Analyzed	01.16.92	01.16.92

D210

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Project: SDG#GMS05/NY60505/DEAD CREEK
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
40122-2	LCS (% Recovery)
40122-3	LCS Duplicate (% Recovery)

PARAMETER	40122-2	40122-3
TCL Semivolatiles (8270)		
Phenol	80 %	78 %
2-Chlorophenol	88 %	85 %
1,4-Dichlorobenzene	71 %	71 %
N-Nitroso-di-n-propylamine	81 %	77 %
1,2,4-Trichlorobenzene	72 %	72 %
4-Chloro-3-methylphenol	78 %	78 %
Acenaphthene	94 %	93 %
4-Nitrophenol	68 %	64 %
2,4-Dinitrotoluene	97 %	90 %
Pentachlorophenol	63 %	57 %
Pyrene	95 %	92 %
Surrogate-NBZ (CL 35-114)	85 %	86 %
Surrogate-FBP (CL 43-116)	91 %	90 %
Surrogate-TPH (CL 33-141)	98 %	95 %
Surrogate-PHL (CL 10-110)	77 %	76 %
Surrogate-2FP (CL 21-110)	83 %	83 %
Surrogate-TBP (CL 10-123)	79 %	78 %
Date Extracted	01.12.92	01.12.92
Date Analyzed	01.17.92	01.17.92

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D211

LOG NO: S2-40122

Received: 09 JAN 92

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Plainview, NY 11803

Project: SDG#GMS05/NY60505/DEAD CREEK
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
40122-2	LCS (% Recovery)
40122-3	LCS Duplicate (% Recovery)

PARAMETER	40122-2	40122-3
Volatiles by GC/MS		
1,1-Dichloroethene	89 %	97 %
Trichloroethene	96 %	107 %
Benzene	107 %	118 %
Toluene	99 %	91 %
Chlorobenzene	96 %	102 %
Surrogate - Toluene-d	96 %	103 %
Surrogate - 4-Bromofluorobenzene	106 %	99 %
Surrogate - 1,2-Dichloroethane-d4	92 %	103 %
Date Analyzed	01.10.92	01.10.92

D212

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Plainview, NY 11803

Project: SDG#GMS05/NY60505/DEAD CREEK
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
40122-1	Site M - South Shore	01-08-92

PARAMETER	40122-1
Lead (7421)	
Lead, ug/l	11
% R Post Digestion Spike (CL 75-125 %)	80 %
Date Analyzed	01.14.92
Selenium (7740)	
Selenium, ug/l	<10
% R Post Digestion Spike (CL 75-125 %)	111 %
Date Analyzed	01.13.92
Arsenic (7060)	
Arsenic, ug/l	<10.0
% R Post Digestion Spike (CL 75-125 %)	115 %
Date Analyzed	01.13.92
Thallium (7481)	
Thallium, ug/l	<50*F65/F5
% R Post Digestion Spike (CL 75-125 %)	45 %
Date Analyzed	01.14.92
Cyanide (9010)	
Cyanide, Total, ug/l	<10
Date Analyzed	01.13.92

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D213

LOG NO: S2-40122

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Plainview, NY 11803

Project: SDG#GMS05/NY60505/DEAD CREEK
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
40122-1	Site M - South Shore	01-08-92

PARAMETER	40122-1
Metals (6010)	
Aluminum, ug/l	<200
Antimony, ug/l	<50
Barium, ug/l	140
Beryllium, ug/l	<5.0
Cadmium, ug/l	<5.0
Calcium, ug/l	46000
Chromium, ug/l	<10
Cobalt, ug/l	<10
Copper, ug/l	200
Iron, ug/l	270
Magnesium, ug/l	3900
Manganese, ug/l	56
Nickel, ug/l	<40
Potassium, ug/l	3700
Silver, ug/l	<10
Sodium , ug/l	20000
Vanadium, ug/l	<10
Zinc, ug/l	130
Interference Check Sample	PASSED
Dilution Check Sample	PASSED
Date Analyzed	01.13.92
Mercury (7470)	
Mercury , ug/l	<0.20
Date Analyzed	01.13.92

D214

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Plainview, NY 11803

Project: SDG#GMS05/NY60505/DEAD CREEK
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
40122-1	Site M - South Shore	01-08-92

PARAMETER	40122-1
Aroclor-1242, ug/l	<0.50
Aroclor-1248, ug/l	<0.50
Aroclor-1254, ug/l	<0.50
Aroclor-1260, ug/l	<0.50
Surrogate-DBC	75 %
Date Extracted	01.13.92
Date Analyzed	01.16.92

SL SAVANNAH LABORATORIES
& ENVIRONMENTAL SERVICES, INC.

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D215

LOG NO: S2-40122

Received: 09 JAN 92

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS05/NY60505/DEAD CREEK
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
40122-1	Site M - South Shore	01-08-92

PARAMETER	40122-1
TCL Pesticides	
alpha-BHC, ug/l	<0.010
beta-BHC, ug/l	<0.010
delta-BHC, ug/l	<0.010
gamma-BHC, ug/l	<0.010
Heptachlor, ug/l	<0.010
Aldrin, ug/l	<0.010
Heptachlor epoxide, ug/l	<0.020
Endosulfan I, ug/l	<0.020
Dieldrin, ug/l	<0.020
4,4'-DDE, ug/l	<0.020
Endrin, ug/l	<0.020
Endosulfan II, ug/l	<0.050
4,4'-DDD, ug/l	<0.050
Endosulfan sulfate, ug/l	<0.10
4,4'-DDT, ug/l	<0.050
Endrin ketone, ug/l	<0.10
Methoxychlor, ug/l	<0.50
alpha-Chlordane, ug/l	<0.010
gamma-Chlordane, ug/l	<0.010
Toxaphene, ug/l	<1.0
Aroclor-1016, ug/l	<0.50
Aroclor-1221, ug/l	<0.50
Aroclor-1232, ug/l	<0.50

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LOG NO: S2-40122

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Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS05/NY60505/DEAD CREEK
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
40122-1	Site M - South Shore	01-08-92

PARAMETER	40122-1
Pentachlorophenol, ug/l	<50
Phenanthrene, ug/l	<10
Anthracene, ug/l	<10
Di-n-butylphthalate, ug/l	<10
Fluoranthene, ug/l	<10
Pyrene, ug/l	<10
Butylbenzylphthalate, ug/l	<10
3,3'-Dichlorobenzidine, ug/l	<20
Benzo(a)anthracene, ug/l	<10
bis(2-Ethylhexyl) phthalate, ug/l	<10
Chrysene, ug/l	<10
Di-n-octylphthalate, ug/l	<10
Benzo(b)fluoranthene, ug/l	<10
Benzo(k)fluoranthene, ug/l	<10
Benzo(a)pyrene, ug/l	<10
Indeno (1,2,3-cd)pyrene, ug/l	<10
Dibenzo(a,h)anthracene, ug/l	<10
Benzo(g,h,i)perylene, ug/l	<10
Surrogate-NBZ (CL 35-114)	90 %
Surrogate-FBP (CL 43-116)	88 %
Surrogate-TPH (CL 33-141)	94 %
Surrogate-PHL (CL 10-110)	85 %
Surrogate-2FP (CL 21-110)	89 %
Surrogate-TBP (CL 10-123)	87 %
Date Extracted	01.12.92
Date Analyzed	01.17.92

SL SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

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D217

LOG NO: S2-40122

Received: 09 JAN 92

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS05/NY60505/DEAD CREEK
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
40122-1	Site M - South Shore	01-08-92

PARAMETER	40122-1
4-Chloro-3-methylphenol, ug/l	<10
2-Methylnaphthalene, ug/l	<10
Hexachlorocyclopentadiene, ug/l	<10
2,4,6-Trichlorophenol, ug/l	<10
2,4,5-Trichlorophenol, ug/l	<10
2-Chloronaphthalene, ug/l	<10
2-Nitroaniline, ug/l	<50
Dimethylphthalate, ug/l	<10
Acenaphthylene, ug/l	<10
3-Nitroaniline, ug/l	<50
Acenaphthene, ug/l	<10
2,4-Dinitrophenol, ug/l	<50
4-Nitrophenol, ug/l	<50
Dibenzofuran, ug/l	<10
2,4-Dinitrotoluene, ug/l	<10
2,6-Dinitrotoluene, ug/l	<10
Diethylphthalate, ug/l	<10
4-Chlorophenyl-phenyl ether, ug/l	<10
Fluorene, ug/l	<10
4-Nitroaniline, ug/l	<50
4,6-Dinitro-2-methylphenol, ug/l	<50
N-Nitrosodiphenylamine/Diphenylamine, ug/l	<10
4-Bromophenyl-phenyl-ether, ug/l	<10
Hexachlorobenzene, ug/l	<10

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LOG NO: S2-40122

Received: 09 JAN 92

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS05/NY60505/DEAD CREEK
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
40122-1	Site M - South Shore	01-08-92

PARAMETER	40122-1
TCL Semivolatiles (8270)	
Phenol, ug/l	<10
bis(2-Chloroethyl) ether, ug/l	<10
2-Chlorophenol, ug/l	<10
1,3-Dichlorobenzene, ug/l	<10
1,4-Dichlorobenzene, ug/l	<10
Benzyl alcohol, ug/l	<10
1,2-Dichlorobenzene, ug/l	<10
2-Methylphenol (o-cresol), ug/l	<10
Bis(2-chloroisopropyl)ether, ug/l	<10
4-Methylphenol (p-cresol), ug/l	<10
N-Nitroso-di-n-propylamine, ug/l	<10
Hexachloroethane, ug/l	<10
Nitrobenzene, ug/l	<10
Isophorone, ug/l	<10
2-Nitrophenol, ug/l	<10
2,4-Dimethylphenol, ug/l	<10
Benzoic acid, ug/l	3J
bis(2-Chloroethoxy) methane, ug/l	<10
2,4-Dichlorophenol, ug/l	<10
1,2,4-Trichlorobenzene, ug/l	<10
Naphthalene, ug/l	<10
4-Chloroaniline, ug/l	<10
Hexachlorobutadiene, ug/l	<10

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Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS05/NY60505/DEAD CREEK
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
40122-1	Site M - South Shore	01-08-92

PARAMETER	40122-1
Benzene, ug/l	<5.0
Cis-1,3-Dichloropropene, ug/l	<5.0
Bromoform, ug/l	<5.0
2-Hexanone, ug/l	<50
4-Methyl-2-pentanone, ug/l	<50
Tetrachloroethene, ug/l	<5.0
Toluene, ug/l	<5.0
Chlorobenzene, ug/l	<5.0
Ethylbenzene, ug/l	<5.0
Styrene, ug/l	<5.0
Xylenes, ug/l	<5.0
Surrogate - Toluene-d	103 %
Surrogate - 4-Bromofluorobenzene	96 %
Surrogate - 1,2-Dichloroethane-d4	99 %
Date Analyzed	01.10.92

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LOG NO: S2-40122

Received: 09 JAN 92

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS05/NY60505/DEAD CREEK
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
40122-1	Site M - South Shore	01-08-92

PARAMETER	40122-1
Volatiles by GC/MS	
Chloromethane, ug/l	<10
Bromomethane, ug/l	<10
Vinyl Chloride, ug/l	<10
Chloroethane, ug/l	<10
Methylene Chloride, ug/l	<5.0
Acetone, ug/l	<100
Carbon Disulfide, ug/l	<5.0
1,1-Dichloroethene, ug/l	<5.0
1,1-Dichloroethane, ug/l	<5.0
cis/trans-1,2-Dichloroethene, ug/l	<5.0
Chloroform, ug/l	<5.0
1,2-Dichloroethane, ug/l	<5.0
2-Butanone, ug/l	<100
1,1,1-Trichloroethane, ug/l	<5.0
Carbon Tetrachloride, ug/l	<5.0
Vinyl Acetate, ug/l	<50
Bromodichloromethane, ug/l	<5.0
1,1,2,2-Tetrachloroethane, ug/l	<5.0
1,2-Dichloropropane, ug/l	<5.0
Trans-1,3-Dichloropropene, ug/l	<5.0
Trichloroethene, ug/l	<5.0
Dibromochloromethane, ug/l	<5.0
1,1,2-Trichloroethane, ug/l	<5.0

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D221

LOG NO: S2-40102

Received: 08 JAN 92

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS05/NY60505/DEAD CREEK
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES
40102-12	Trip Blank

PARAMETER	40102-12
Benzene, ug/l	<5.0
Cis-1,3-Dichloropropene, ug/l	<5.0
Bromoform, ug/l	<5.0
2-Hexanone, ug/l	<50
4-Methyl-2-pentanone, ug/l	<50
Tetrachloroethene, ug/l	<5.0
Toluene, ug/l	<5.0
Chlorobenzene, ug/l	<5.0
Ethylbenzene, ug/l	<5.0
Styrene, ug/l	<5.0
Xylenes, ug/l	<5.0
Surrogate - Toluene-d	104 %
Surrogate - 4-Bromofluorobenzene	100 %
Surrogate - 1,2-Dichloroethane-d4	101 %
Date Analyzed	01.09.92

SDG# GMS05

*F33 - Surrogates were not reported due to sample dilution required prior to analysis.
*F61 - MS/MSD were not recovered due to the abundance of a target analyte in the sample.
*F39 - Due to the abundance of organics present in the samples, medium level extraction was employed which increased reported detection limits.
*F62 - Matrix spikes were not recovered due to sample dilution required prior to analysis.

J. W. Andrews

J. W. Andrews, Ph. D.

0222

SL SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

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LOG NO: S2-40102

Received: 08 JAN 92

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS05/NY60505/DEAD CREEK
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES
40102-12	Trip Blank

PARAMETER	40102-12
Volatiles by GC/MS	
Chloromethane, ug/l	<10
Bromomethane, ug/l	<10
Vinyl Chloride, ug/l	<10
Chloroethane, ug/l	<10
Methylene Chloride, ug/l	<5.0
Acetone, ug/l	<100
Carbon Disulfide, ug/l	<5.0
1,1-Dichloroethene, ug/l	<5.0
1,1-Dichloroethane, ug/l	<5.0
cis/trans-1,2-Dichloroethene, ug/l	<5.0
Chloroform, ug/l	<5.0
1,2-Dichloroethane, ug/l	<5.0
2-Butanone, ug/l	<100
1,1,1-Trichloroethane, ug/l	<5.0
Carbon Tetrachloride, ug/l	<5.0
Vinyl Acetate, ug/l	<50
Bromodichloromethane, ug/l	<5.0
1,1,2,2-Tetrachloroethane, ug/l	<5.0
1,2-Dichloropropane, ug/l	<5.0
Trans-1,3-Dichloropropene, ug/l	<5.0
Trichloroethene, ug/l	<5.0
Dibromochloromethane, ug/l	<5.0
1,1,2-Trichloroethane, ug/l	<5.0

SL SAVANNAH LABORATORIES
& ENVIRONMENTAL SERVICES, INC.

5102 LaRoche Avenue • Savannah, GA 31404 • (912) 354-7858 • Fax (912) 352-0165

D223

LOG NO: S2-40102

Received: 08 JAN 92

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS05/NY60505/DEAD CREEK
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
40102-10	Method Blank-Soil
40102-11	% RPD for MS

PARAMETER	40102-10	40102-11
1,1,2-Trichloroethane, ug/kg dw	<5.0	---
Benzene, ug/kg dw	<5.0	8.5 %
Cis-1,3-Dichloropropene, ug/kg dw	<5.0	---
Bromoform, ug/kg dw	<5.0	---
2-Hexanone, ug/kg dw	<50	---
4-Methyl-2-pentanone, ug/kg dw	<50	---
Tetrachloroethene, ug/kg dw	<5.0	---
Toluene, ug/kg dw	<5.0	4.7 %
Chlorobenzene, ug/kg dw	<5.0	4.4 %
Ethylbenzene, ug/kg dw	<5.0	---
Styrene, ug/kg dw	<5.0	---
Xylenes, ug/kg dw	<5.0	---
Surrogate - Toluene-d	99 %	---
Surrogate - 4-Bromofluorobenzene	94 %	---
Surrogate - 1,2-Dichloroethane-d4	98 %	---
Date Analyzed	01.16.92	---

SL SAVANNAH LABORATORIES
& ENVIRONMENTAL SERVICES, INC.

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LOG NO: S2-40102

Received: 08 JAN 92

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125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS05/NY60505/DEAD CREEK
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
40102-10	Method Blank-Soil
40102-11	% RPD for MS

PARAMETER	40102-10	40102-11
Volatiles by GC/MS		
Chloromethane, ug/kg dw	<10	---
Bromomethane, ug/kg dw	<10	---
Vinyl Chloride, ug/kg dw	<10	---
Chloroethane, ug/kg dw	<10	---
Methylene Chloride, ug/kg dw	<5.0	---
Acetone, ug/kg dw	<100	---
Carbon Disulfide, ug/kg dw	<5.0	---
1,1-Dichloroethene, ug/kg dw	<5.0	0 %
1,1-Dichloroethane, ug/kg dw	<5.0	---
cis/trans-1,2-Dichloroethene, ug/kg dw	<5.0	---
Chloroform, ug/kg dw	<5.0	---
1,2-Dichloroethane, ug/kg dw	<5.0	---
2-Butanone, ug/kg dw	<100	---
1,1,1-Trichloroethane, ug/kg dw	<5.0	---
Carbon Tetrachloride, ug/kg dw	<5.0	---
Vinyl Acetate, ug/kg dw	<50	---
Bromodichloromethane, ug/kg dw	<5.0	---
1,1,2,2-Tetrachloroethane, ug/kg dw	<5.0	---
1,2-Dichloropropane, ug/kg dw	<5.0	---
Trans-1,3-Dichloropropene, ug/kg dw	<5.0	---
Trichloroethene, ug/kg dw	<5.0	10 %
Dibromochloromethane, ug/kg dw	<5.0	---

SL SAVANNAH LABORATORIES
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D225

LOG NO: S2-40102

Received: 08 JAN 92

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS05/NY60505/DEAD CREEK
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
40102-10	Method Blank-Soil
40102-11	% RPD for MS

PARAMETER	40102-10	40102-11
4-Bromophenyl-phenyl-ether, ug/kg dw	<330	---
Hexachlorobenzene, ug/kg dw	<330	---
Pentachlorophenol, ug/kg dw	<1700	*F62
Phenanthrene, ug/kg dw	<330	---
Anthracene, ug/kg dw	<330	---
Di-n-butylphthalate, ug/kg dw	<330	---
Fluoranthene, ug/kg dw	<330	---
Pyrene, ug/kg dw	<330	*F62
Butylbenzylphthalate, ug/kg dw	<330	---
3,3'-Dichlorobenzidine, ug/kg dw	<660	---
Benzo(a)anthracene, ug/kg dw	<330	---
bis(2-Ethylhexyl) phthalate, ug/kg dw	<330	---
Chrysene, ug/kg dw	<330	---
Di-n-octylphthalate, ug/kg dw	<330	---
Benzo(b)fluoranthene, ug/kg dw	<330	---
Benzo(k)fluoranthene, ug/kg dw	<330	---
Benzo(a)pyrene, ug/kg dw	<330	---
Indeno (1,2,3-cd)pyrene, ug/kg dw	<330	---
Dibenzo(a,h)anthracene, ug/kg dw	<330	---
Benzo(g,h,i)perylene, ug/kg dw	<330	---
Surrogate-NBZ (CL 23-120)	80 %	---
Surrogate-FBP (CL 30-115)	80 %	---
Surrogate-TPH (CL 18-137)	103 %	---
Surrogate-PHL (CL 24-113)	87 %	---
Surrogate-2FP (CL 25-121)	77 %	---
Surrogate-TBP (CL 19-122)	86 %	---
Date Extracted	01.08.92	---
Date Analyzed	01.14.92	---

D226

SL SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

5102 LaRoche Avenue • Savannah, GA 31404 • (912) 354-7858 • Fax (912) 352-0165

LOG NO: S2-40102

Received: 08 JAN 92

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS05/NY60505/DEAD CREEK
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
40102-10	Method Blank-Soil
40102-11	% RPD for MS

PARAMETER	40102-10	40102-11
Hexachlorobutadiene, ug/kg dw	<330	---
4-Chloro-3-methylphenol, ug/kg dw	<330	*F62
2-Methylnaphthalene, ug/kg dw	<330	---
Hexachlorocyclopentadiene, ug/kg dw	<330	---
2,4,6-Trichlorophenol, ug/kg dw	<330	---
2,4,5-Trichlorophenol, ug/kg dw	<330	---
2-Chloronaphthalene, ug/kg dw	<330	---
2-Nitroaniline, ug/kg dw	<1700	---
Dimethylphthalate, ug/kg dw	<330	---
Acenaphthylene, ug/kg dw	<330	---
3-Nitroaniline, ug/kg dw	<1700	---
Acenaphthene, ug/kg dw	<330	*F62
2,4-Dinitrophenol, ug/kg dw	<1700	---
4-Nitrophenol, ug/kg dw	<1700	*F62
Dibenzofuran, ug/kg dw	<330	---
2,4-Dinitrotoluene, ug/kg dw	<330	*F62
2,6-Dinitrotoluene, ug/kg dw	<330	---
Diethylphthalate, ug/kg dw	<330	---
4-Chlorophenyl-phenyl ether, ug/kg dw	<330	---
Fluorene, ug/kg dw	<330	---
4-Nitroaniline, ug/kg dw	<1700	---
4,6-Dinitro-2-methylphenol, ug/kg dw	<1700	---
N-Nitrosodiphenylamine/Diphenylamine, ug/kg dw	<330	---

SL SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

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D227

LOG NO: S2-40102

Received: 08 JAN 92

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS05/NY60505/DEAD CREEK
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
40102-10	Method Blank-Soil
40102-11	% RPD for MS

PARAMETER	40102-10	40102-11
TCL Semivolatiles (8270)		
Phenol, ug/kg dw	<330	*F62
bis(2-Chloroethyl) ether, ug/kg dw	<330	---
2-Chlorophenol, ug/kg dw	<330	*F62
1,3-Dichlorobenzene, ug/kg dw	<330	---
1,4-Dichlorobenzene, ug/kg dw	<330	*F62
Benzyl alcohol, ug/kg dw	<330	---
1,2-Dichlorobenzene, ug/kg dw	<330	---
2-Methylphenol (o-cresol), ug/kg dw	<330	---
Bis(2-chloroisopropyl)ether, ug/kg dw	<330	---
4-Methylphenol (p-cresol), ug/kg dw	<330	---
N-Nitroso-di-n-propylamine, ug/kg dw	<330	*F62
Hexachloroethane, ug/kg dw	<330	---
Nitrobenzene, ug/kg dw	<330	---
Isophorone, ug/kg dw	<330	---
2-Nitrophenol, ug/kg dw	<330	---
2,4-Dimethylphenol, ug/kg dw	<330	---
Benzoic acid, ug/kg dw	<1700	---
bis(2-Chloroethoxy) methane, ug/kg dw	<330	---
2,4-Dichlorophenol, ug/kg dw	<330	---
1,2,4-Trichlorobenzene, ug/kg dw	<330	*F62
Naphthalene, ug/kg dw	<330	---
4-Chloroaniline, ug/kg dw	<330	---

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SL SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

5102 LaRoche Avenue • Savannah, GA 31404 • (912) 354-7858 • Fax (912) 352-0165

LOG NO: S2-40102

Received: 08 JAN 92

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS05/NY60505/DEAD CREEK
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
40102-10	Method Blank-Soil
40102-11	% RPD for MS

PARAMETER	40102-10	40102-11
TCL Pesticides		
Aroclor-1016, ug/kg dw	<80	---
Aroclor-1221, ug/kg dw	<80	---
Aroclor-1232, ug/kg dw	<80	---
Aroclor-1242, ug/kg dw	<80	---
Aroclor-1248, ug/kg dw	<80	---
Aroclor-1254, ug/kg dw	<80	---
Aroclor-1260, ug/kg dw	<80	---
Surrogate-DBC	91 %	---
Date Extracted	01.09.92	---
Date Analyzed	01.15.92	---

SL SAVANNAH LABORATORIES
& ENVIRONMENTAL SERVICES, INC.

5102 LaRoche Avenue • Savannah, GA 31404 • (912) 354-7858 • Fax (912) 352-0165

D229

LOG NO: S2-40102

Received: 08 JAN 92

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS05/NY60505/DEAD CREEK
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
40102-8	Matrix Spike M-4A (% Recovery)
40102-9	Matrix Spike Dup M-4A (% Recovery)

PARAMETER	40102-8	40102-9
Volatiles by GC/MS		
1,1-Dichloroethene	90 %	90 %
Trichloroethene	74 %	82 %
Benzene	90 %	98 %
Toluene	84 %	88 %
Chlorobenzene	89 %	93 %
Surrogate - Toluene-d	67 %	67 %
Surrogate - 4-Bromofluorobenzene	67 %	71 %
Surrogate - 1,2-Dichloroethane-d4	72 %	71 %
Date Analyzed	01.16.92	01.16.92

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D230

LOG NO: S2-40102

Received: 08 JAN 92

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS05/NY60505/DEAD CREEK
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
40102-8	Matrix Spike M-4A (% Recovery)
40102-9	Matrix Spike Dup M-4A (% Recovery)

PARAMETER	40102-8	40102-9
TCL Pesticides		
Aroclor-1260	*F61	*F61
Surrogate-DBC	*F33	*F33
Date Extracted	01.09.92	01.09.92
Date Analyzed	01.15.92	01.15.92
TCL Semivolatiles (8270)		
Phenol	*F62	*F62
2-Chlorophenol	*F62	*F62
1,4-Dichlorobenzene	*F62	*F62
N-Nitroso-di-n-propylamine	*F62	*F62
1,2,4-Trichlorobenzene	*F62	*F62
4-Chloro-3-methylphenol	*F62	*F62
Acenaphthene	*F62	*F62
4-Nitrophenol	*F62	*F62
2,4-Dinitrotoluene	*F62	*F62
Pentachlorophenol	*F62	*F62
Pyrene	*F62	*F62
Surrogate-NBZ (CL 23-120)	72 %	74 %
Surrogate-FBP (CL 30-115)	92 %	96 %
Surrogate-TPH (CL 18-137)	98 %	105 %
Surrogate-PHL (CL 24-113)	78 %	82 %
Surrogate-2FP (CL 25-121)	82 %	81 %
Surrogate-TBP (CL 19-122)	75 %	94 %
Date Extracted	01.08.92	01.08.92
Date Analyzed	01.14.92	01.14.92

SL SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

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D231

LOG NO: S2-40102

Received: 08 JAN 92

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS05/NY60505/DEAD CREEK
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
40102-7	M-4A	01-07-92

PARAMETER	40102-7
Benzene, ug/kg dw	<2600
Cis-1,3-Dichloropropene, ug/kg dw	<2600
Bromoform, ug/kg dw	<2600
2-Hexanone, ug/kg dw	<26000
4-Methyl-2-pentanone, ug/kg dw	<26000
Tetrachloroethene, ug/kg dw	<2600
Toluene, ug/kg dw	<2600
Chlorobenzene, ug/kg dw	<2600
Ethylbenzene, ug/kg dw	<2600
Styrene, ug/kg dw	<2600
Xylenes, ug/kg dw	<2600
Surrogate - Toluene-d	77 %
Surrogate - 4-Bromofluorobenzene	73 %
Surrogate - 1,2-Dichloroethane-d4	80 %
Date Analyzed	01.16.92
Percent Solids, %	24 %

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Plainview, NY 11803

Project: SDG#GMS05/NY60505/DEAD CREEK
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
40102-7	M-4A	01-07-92

PARAMETER	40102-7
Volatiles by GC/MS	
Chloromethane, ug/kg dw	<5200*F39
Bromomethane, ug/kg dw	<5200
Vinyl Chloride, ug/kg dw	<5200
Chloroethane, ug/kg dw	<5200
Methylene Chloride, ug/kg dw	<2600
Acetone, ug/kg dw	<52000
Carbon Disulfide, ug/kg dw	<2600
1,1-Dichloroethene, ug/kg dw	<2600
1,1-Dichloroethane, ug/kg dw	<2600
cis/trans-1,2-Dichloroethene, ug/kg dw	<2600
Chloroform, ug/kg dw	<2600
1,2-Dichloroethane, ug/kg dw	<2600
2-Butanone, ug/kg dw	<52000
1,1,1-Trichloroethane, ug/kg dw	<2600
Carbon Tetrachloride, ug/kg dw	<2600
Vinyl Acetate, ug/kg dw	<26000
Bromodichloromethane, ug/kg dw	<2600
1,1,2,2-Tetrachloroethane, ug/kg dw	<2600
1,2-Dichloropropane, ug/kg dw	<2600
Trans-1,3-Dichloropropene, ug/kg dw	<2600
Trichloroethene, ug/kg dw	<2600
Dibromochloromethane, ug/kg dw	<2600
1,1,2-Trichloroethane, ug/kg dw	<2600

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D233

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Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS05/NY60505/DEAD CREEK
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
40102-7	M-4A	01-07-92

PARAMETER	40102-7
Pentachlorophenol, ug/kg dw	<69000
Phenanthrene, ug/kg dw	13000J
Anthracene, ug/kg dw	3900J
Di-n-butylphthalate, ug/kg dw	<14000
Fluoranthene, ug/kg dw	21000
Pyrene, ug/kg dw	27000
Butylbenzylphthalate, ug/kg dw	1600J
3,3'-Dichlorobenzidine, ug/kg dw	<28000
Benzo(a)anthracene, ug/kg dw	9200J
bis(2-Ethylhexyl) phthalate, ug/kg dw	<14000
Chrysene, ug/kg dw	9900J
Di-n-octylphthalate, ug/kg dw	<14000
Benzo(b)fluoranthene, ug/kg dw	8400J
Benzo(k)fluoranthene, ug/kg dw	6600J
Benzo(a)pyrene, ug/kg dw	6900J
Indeno (1,2,3-cd)pyrene, ug/kg dw	4300J
Dibenzo(a,h)anthracene, ug/kg dw	<14000
Benzo(g,h,i)perylene, ug/kg dw	6000J
Surrogate-NBZ (CL 23-120)	72 %
Surrogate-FBP (CL 30-115)	82 %
Surrogate-TPH (CL 18-137)	97 %
Surrogate-PHL (CL 24-113)	81 %
Surrogate-2FP (CL 25-121)	93 %
Surrogate-TBP (CL 19-122)	89 %
Date Extracted	01.08.92
Date Analyzed	01.14.92

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SL SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

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LOG NO: S2-40102

Received: 08 JAN 92

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Geraghty & Miller, Inc.
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Plainview, NY 11803

Project: SDG#GMS05/NY60505/DEAD CREEK
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
40102-7	M-4A	01-07-92

PARAMETER	40102-7
4-Chloro-3-methylphenol, ug/kg dw	<14000
2-Methylnaphthalene, ug/kg dw	1600J
Hexachlorocyclopentadiene, ug/kg dw	<14000
2,4,6-Trichlorophenol, ug/kg dw	<14000
2,4,5-Trichlorophenol, ug/kg dw	<14000
2-Chloronaphthalene, ug/kg dw	<14000
2-Nitroaniline, ug/kg dw	<69000
Dimethylphthalate, ug/kg dw	<14000
Acenaphthylene, ug/kg dw	<14000
3-Nitroaniline, ug/kg dw	<69000
Acenaphthene, ug/kg dw	1500J
2,4-Dinitrophenol, ug/kg dw	<69000
4-Nitrophenol, ug/kg dw	<69000
Dibenzofuran, ug/kg dw	2100J
2,4-Dinitrotoluene, ug/kg dw	<14000
2,6-Dinitrotoluene, ug/kg dw	<14000
Diethylphthalate, ug/kg dw	<14000
4-Chlorophenyl-phenyl ether, ug/kg dw	<14000
Fluorene, ug/kg dw	5900J
4-Nitroaniline, ug/kg dw	<69000
4,6-Dinitro-2-methylphenol, ug/kg dw	<69000
N-Nitrosodiphenylamine/Diphenylamine, ug/kg dw	<14000
4-Bromophenyl-phenyl-ether, ug/kg dw	<14000
Hexachlorobenzene, ug/kg dw	<14000

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D235

LOG NO: S2-40102

Received: 08 JAN 92

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS05/NY60505/DEAD CREEK
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
40102-7	M-4A	01-07-92

PARAMETER	40102-7
TCL Semivolatiles (8270)	
Phenol, ug/kg dw	<14000
bis(2-Chloroethyl) ether, ug/kg dw	<14000
2-Chlorophenol, ug/kg dw	<14000
1,3-Dichlorobenzene, ug/kg dw	2300J
1,4-Dichlorobenzene, ug/kg dw	27000
Benzyl alcohol, ug/kg dw	<14000
1,2-Dichlorobenzene, ug/kg dw	3300J
2-Methylphenol (o-cresol), ug/kg dw	<14000
Bis(2-chloroisopropyl)ether, ug/kg dw	<14000
4-Methylphenol (p-cresol), ug/kg dw	<14000
N-Nitroso-di-n-propylamine, ug/kg dw	<14000
Hexachloroethane, ug/kg dw	<14000
Nitrobenzene, ug/kg dw	<14000
Isophorone, ug/kg dw	<14000
2-Nitrophenol, ug/kg dw	<14000
2,4-Dimethylphenol, ug/kg dw	<14000
Benzoic acid, ug/kg dw	<69000
bis(2-Chloroethoxy) methane, ug/kg dw	<14000
2,4-Dichlorophenol, ug/kg dw	<14000
1,2,4-Trichlorobenzene, ug/kg dw	5000J
Naphthalene, ug/kg dw	2600J
4-Chloroaniline, ug/kg dw	<14000
Hexachlorobutadiene, ug/kg dw	<14000

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0236

LOG NO: S2-40102

Received: 08 JAN 92

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS05/NY60505/DEAD CREEK
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
40102-7	M-4A	01-07-92

PARAMETER	40102-7
TCL Pesticides	
Aroclor-1016, ug/kg dw	<33000
Aroclor-1221, ug/kg dw	<33000
Aroclor-1232, ug/kg dw	<33000
Aroclor-1242, ug/kg dw	<33000
Aroclor-1248, ug/kg dw	140000
Aroclor-1254, ug/kg dw	120000
Aroclor-1260, ug/kg dw	51000
Surrogate-DBC	*F33
Date Extracted	01.09.92
Date Analyzed	01.15.92

SL SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

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D237

LOG NO: S2-40102

Received: 08 JAN 92

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS05/NY60505/DEAD CREEK
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
40102-6	M-7A	01-07-92

PARAMETER	40102-6
TCL Pesticides	
Aroclor-1016, ug/kg dw	<31000
Aroclor-1221, ug/kg dw	<31000
Aroclor-1232, ug/kg dw	<31000
Aroclor-1242, ug/kg dw	<31000
Aroclor-1248, ug/kg dw	21000J
Aroclor-1254, ug/kg dw	54000
Aroclor-1260, ug/kg dw	22000J
Surrogate-DBC	*F33
Date Extracted	01.09.92
Date Analyzed	01.15.92
Percent Solids, %	26 %

SL SAVANNAH LABORATORIES
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D238

LOG NO: S2-40102

Received: 08 JAN 92

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS05/NY60505/DEAD CREEK
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
40102-1	M-1A	01-07-92
40102-2	M-2A	01-07-92
40102-3	M-3A	01-07-92
40102-4	M-5A	01-07-92
40102-5	M-6A	01-07-92

PARAMETER	40102-1	40102-2	40102-3	40102-4	40102-5
TCL Pesticides					
Aroclor-1016, ug/kg dw	<14000	<38000	<35000	<33000	<35000
Aroclor-1221, ug/kg dw	<14000	<38000	<35000	<33000	<35000
Aroclor-1232, ug/kg dw	<14000	<38000	<35000	<33000	<35000
Aroclor-1242, ug/kg dw	<14000	<38000	<35000	<33000	<35000
Aroclor-1248, ug/kg dw	16000	67000	110000	110000	260000
Aroclor-1254, ug/kg dw	31000	77000	63000	110000	190000
Aroclor-1260, ug/kg dw	16000	43000	19000J	39000	55000
Surrogate-DBC	*F33	*F33	*F33	*F33	*F33
Date Extracted	01.09.92	01.09.92	01.09.92	01.09.92	01.09.92
Date Analyzed	01.15.92	01.15.92	01.15.92	01.15.92	01.15.92
Percent Solids, %	56 %	21 %	23 %	24 %	23 %

SL SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

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D239

LOG NO: S1-36621

Received: 17 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS01/LTO#06490/DEAD DR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
36621-8	GML1 (8-14') Matrix Spike (% Recovery)
36621-9	GML1 (8-14') Matrix Spike Dup (% Recovery)

PARAMETER	36621-8	36621-9
Arsenic (7060)		
Arsenic	---	---
Thallium (7841)		
Thallium	77 %	78 %
Cyanide (9010A)		
Cyanide, Total	35 %	41 %

8270 results: *A=260000D *B=100000D *C=79000D
*D=2300U

Janette D. Long

D240

SL SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

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LOG NO: S1-36621

Received: 17 OCT 91

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Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS01/LTO#06490/DEAD DR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
36621-8	GML1 (8-14') Matrix Spike (% Recovery)
36621-9	GML1 (8-14') Matrix Spike Dup (% Recovery)

PARAMETER	36621-8	36621-9
Metals (6010)		
Aluminum	---	---
Antimony	44 %	45 %
Barium	102 %	99 %
Beryllium	102 %	100 %
Cadmium	104 %	105 %
Calcium	---	---
Chromium	99 %	108 %
Cobalt	100 %	98 %
Copper	108 %	80 %
Iron	---	---
Magnesium	---	---
Manganese	84 %	89 %
Nickel	168 %	0 %
Potassium	---	---
Silver	100 %	98 %
Sodium	---	---
Vanadium	100 %	95 %
Zinc	11 %	68 %
Mercury (7471)		
Mercury	107 %	106 %
Lead (7421)		
Lead	---	---
Selenium (7740)		
Selenium, mg/l	76 %	94 %

SL SAVANNAH LABORATORIES
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D241

LOG NO: S1-36621

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Plainview, NY 11803

Project: SDG#GMS01/LTO#06490/DEAD DR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID
36621-8	GML1 (8-14') Matrix Spike (% Recovery)
36621-9	GML1 (8-14') Matrix Spike Dup (% Recovery)

PARAMETER	36621-8	36621-9
Volatiles by GC/MS (8240)		
1,1-Dichloroethene	71 %	59 %
Trichloroethene	118 %	101 %
Benzene	124 %	105 %
Toluene	186 %	67 %
Chlorobenzene	118 %	104 %
Semivolatiles (8270)		
Phenol	---	---
2-Chlorophenol	---	---
1,4-Dichlorobenzene	---	---
N-Nitroso-di-n-propylamine	---	---
1,2,4-Trichlorobenzene	---	---
4-Chloro-3-methylphenol	---	---
Acenaphthene	---	---
4-Nitrophenol	---	---
2,4-Dinitrotoluene	---	---
Pentachlorophenol	---	---
Pyrene	---	---
Pesticides (8080)		
gamma-BHC	---	---
Heptachlor	---	---
Aldrin	---	---
Dieldrin	---	---
Endrin	---	---
4,4'-DDT	---	---

D242 SL SAVANNAH LABORATORIES
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5102 LaRoche Avenue • Savannah, GA 31404 • (912) 354-7858 • Fax (912) 352-0165

LOG NO: S1-36621

Received: 17 OCT 91

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125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS01/LTO#06490/DEAD DR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
36621-7	Site L Equipment Blank	10-16-91

PARAMETER	36621-7
Mercury (7470)	
Mercury , ug/l	0.20U
Date Analyzed	11.14.91
Lead (7421)	
Lead, ug/l	3.0U
Date Analyzed	10.21.91
Selenium (7740)	
Selenium, ug/l	5.0UW
Date Analyzed	12.06.91
Arsenic (7060)	
Arsenic, ug/l	10.0U
Date Analyzed	12.04.91
Thallium (7481)	
Thallium, ug/l	10.0UW
Date Analyzed	12.11.91
Cyanide (9010)	
Cyanide, Total, ug/l	10U
Date Analyzed	10.25.91

SL SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

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D243

LOG NO: S1-36621

Received: 17 OCT 91

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Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS01/LTO#06490/DEAD DR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
36621-7	Site L Equipment Blank	10-16-91

PARAMETER	36621-7
Aroclor-1248, ug/l	0.50U
Aroclor-1254, ug/l	1.0U
Aroclor-1260, ug/l	1.0U
Dieldrin, ug/l	0.1U
Date Extracted	10.21.91
Date Analyzed	12.05.91
Metals (6010)	
Aluminum, ug/l	200U
Antimony, ug/l	50.0U
Barium, ug/l	10.0U
Beryllium, ug/l	5.0U
Cadmium, ug/l	5.0U
Calcium, ug/l	341B
Chromium, ug/l	10.0U
Cobalt, ug/l	10.0U
Copper, ug/l	25.0U
Iron, ug/l	151
Magnesium, ug/l	50.0U
Manganese, ug/l	10.0U
Nickel, ug/l	40.0U
Potassium, ug/l	1000U
Silver, ug/l	10.0U
Sodium , ug/l	997B
Vanadium, ug/l	10.0U
Zinc, ug/l	20.0U
Date Analyzed	10.21.91

D244

SL SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

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LOG NO: S1-36621

Received: 17 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS01/LTO#06490/DEAD DR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
36621-7	Site L Equipment Blank	10-16-91

PARAMETER	36621-7
Pesticides (8080)	
alpha-BHC, ug/l	0.050U
beta-BHC, ug/l	0.050U
delta-BHC, ug/l	0.050U
gamma-BHC, ug/l	0.050U
Heptachlor, ug/l	0.050U
Aldrin, ug/l	0.050U
Heptachlor epoxide, ug/l	0.050U
Endosulfan I, ug/l	0.050U
4,4'-DDE, ug/l	0.10U
Endrin, ug/l	0.10U
Endosulfan II, ug/l	0.10U
4,4'-DDD, ug/l	0.10U
Endosulfan sulfate, ug/l	0.10U
4,4'-DDT, ug/l	0.10U
Endrin ketone, ug/l	0.10U
Methoxychlor, ug/l	0.50U
alpha-Chlordane, ug/l	0.50U
gamma-Chlordane, ug/l	0.50U
Toxaphene, ug/l	1.0U
Aroclor-1016, ug/l	0.50U
Aroclor-1221, ug/l	0.50U
Aroclor-1232, ug/l	0.50U
Aroclor-1242, ug/l	0.50U

SL SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

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D245

LOG NO: S1-36621

Received: 17 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS01/LTO#06490/DEAD DR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
36621-7	Site L Equipment Blank	10-16-91

PARAMETER	36621-7
Pentachlorophenol, ug/l	50U
Phenanthrene, ug/l	10U
Anthracene, ug/l	10U
Di-n-butylphthalate, ug/l	10U
Fluoranthene, ug/l	10U
Pyrene, ug/l	10U
Butylbenzylphthalate, ug/l	10U
3,3'-Dichlorobenzidine, ug/l	20U
Benzo(a)anthracene, ug/l	10U
bis(2-Ethylhexyl) phthalate, ug/l	1.0J
Chrysene, ug/l	10U
Di-n-octylphthalate, ug/l	10U
Benzo(b)fluoranthene, ug/l	10U
Benzo(k)fluoranthene, ug/l	10U
Benzo(a)pyrene, ug/l	10U
Indeno (1,2,3-cd)pyrene, ug/l	10U
Dibenzo(a,h)anthracene, ug/l	10U
Benzo(g,h,i)perylene, ug/l	10U
Date Extracted	10.22.91
Date Analyzed	10.26.91

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SL SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

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LOG NO: S1-36621

Received: 17 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS01/LTO#06490/DEAD DR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
36621-7	Site L Equipment Blank	10-16-91

PARAMETER	36621-7
4-Chloro-3-methylphenol, ug/l	10U
2-Methylnaphthalene, ug/l	10U
Hexachlorocyclopentadiene, ug/l	10U
2,4,6-Trichlorophenol, ug/l	10U
2,4,5-Trichlorophenol, ug/l	10U
2-Chloronaphthalene, ug/l	10U
2-Nitroaniline, ug/l	50U
Dimethylphthalate, ug/l	10U
Acenaphthylene, ug/l	10U
3-Nitroaniline, ug/l	50U
Acenaphthene, ug/l	10U
2,4-Dinitrophenol, ug/l	50U
4-Nitrophenol, ug/l	50U
Dibenzofuran, ug/l	10U
2,4-Dinitrotoluene, ug/l	10U
2,6-Dinitrotoluene, ug/l	10U
Diethylphthalate, ug/l	10U
4-Chlorophenyl-phenyl ether, ug/l	10U
Fluorene, ug/l	10U
4-Nitroaniline, ug/l	50U
4,6-Dinitro-2-methylphenol, ug/l	50U
N-Nitrosodiphenylamine/Diphenylamine, ug/l	10U
4-Bromophenyl-phenyl-ether, ug/l	10U
Hexachlorobenzene, ug/l	10U

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D247

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Mr. Brian Blum
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125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS01/LTO#06490/DEAD DR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
36621-7	Site L Equipment Blank	10-16-91

PARAMETER	36621-7
Semivolatiles (8270)	
Phenol, ug/l	10U
bis(2-Chloroethyl) ether, ug/l	10U
2-Chlorophenol, ug/l	10U
1,3-Dichlorobenzene, ug/l	10U
1,4-Dichlorobenzene, ug/l	10U
Benzyl alcohol, ug/l	10U
1,2-Dichlorobenzene, ug/l	10U
2-Methylphenol (o-cresol), ug/l	10U
Bis(2-chloroisopropyl)ether, ug/l	10U
4-Methylphenol (p-cresol), ug/l	10U
N-Nitroso-di-n-propylamine, ug/l	10U
Hexachloroethane, ug/l	10U
Nitrobenzene, ug/l	10U
Isophorone, ug/l	10U
2-Nitrophenol, ug/l	10U
2,4-Dimethylphenol, ug/l	10U
Benzoic acid, ug/l	50U
bis(2-Chloroethoxy) methane, ug/l	10U
2,4-Dichlorophenol, ug/l	10U
1,2,4-Trichlorobenzene, ug/l	10U
Naphthalene, ug/l	10U
4-Chloroaniline, ug/l	10U
Hexachlorobutadiene, ug/l	10U

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Project: SDG#GMS01/LTO#06490/DEAD DR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
36621-7	Site L Equipment Blank	10-16-91

PARAMETER	36621-7
Benzene, ug/l	5.0U
Cis-1,3-Dichloropropene, ug/l	5.0U
Bromoform, ug/l	5.0U
2-Hexanone, ug/l	10U
4-Methyl-2-pentanone, ug/l	10U
Tetrachloroethene, ug/l	5.0U
Toluene, ug/l	5.0U
Chlorobenzene, ug/l	5.0U
Ethylbenzene, ug/l	5.0U
Styrene, ug/l	5.0U
Xylenes, ug/l	5.0U
Date Analyzed	10.24.91

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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
36621-7	Site L Equipment Blank	10-16-91

PARAMETER	36621-7
Volatiles by GC/MS (8240)	
Chloromethane, ug/l	10U
Bromomethane, ug/l	10U
Vinyl Chloride, ug/l	10U
Chloroethane, ug/l	10U
Methylene Chloride, ug/l	5.0U
Acetone, ug/l	10U
Carbon Disulfide, ug/l	5.0U
1,1-Dichloroethene, ug/l	5.0U
1,1-Dichloroethane, ug/l	5.0U
cis/trans-1,2-Dichloroethylene, ug/l	5.0U
Chloroform, ug/l	5.0U
1,2-Dichloroethane, ug/l	5.0U
2-Butanone, ug/l	10U
1,1,1-Trichloroethane, ug/l	5.0U
Carbon Tetrachloride, ug/l	5.0U
Vinyl Acetate, ug/l	10U
Bromodichloromethane, ug/l	5.0U
1,1,2,2-Tetrachloroethane, ug/l	5.0U
1,2-Dichloropropane, ug/l	5.0U
Trans-1,3-Dichloropropene, ug/l	5.0U
Trichloroethene, ug/l	5.0U
Dibromochloromethane, ug/l	5.0U
1,1,2-Trichloroethane, ug/l	5.0U

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Received: 17 OCT 91

Mr. Brian Blum
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125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS01/LTO#06490/DEAD DR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
36621-3	GML5 (7-8.5')	10-15-91
36621-4	GML4 (8-10')	10-15-91
36621-5	GML2 (8-10')	10-15-91
36621-6	GML3 (9-11')	10-16-91

PARAMETER	36621-3	36621-4	36621-5	36621-6
Lead (7421)				
Lead, mg/kg dw	8.7*	7.6*	5.3*	11.7*
Date Analyzed	11.06.91	11.04.91	11.04.91	11.04.91
Selenium (7740)				
Selenium, mg/kg dw	1.4UW	1.3UW	1.3UW	1.4US
Date Analyzed	11.17.91	11.17.91	11.17.91	11.17.91
Arsenic (7060)				
Arsenic, mg/kg dw	12.6	4.9	68.7	10.1
Date Analyzed	12.04.91	12.02.91	12.02.91	12.02.91
Thallium (7841)				
Thallium, mg/kg dw	2.7UW	2.6UW	2.5UW	2.7UW
Date Analyzed	11.04.91	11.04.91	11.04.91	11.04.91
Percent Solids, %	74	79	79	73

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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
36621-3	GML5 (7-8.5')	10-15-91
36621-4	GML4 (8-10')	10-15-91
36621-5	GML2 (8-10')	10-15-91
36621-6	GML3 (9-11')	10-16-91

PARAMETER	36621-3	36621-4	36621-5	36621-6
Metals (6010)				
Aluminum, mg/kg dw	2810	5290	3190	12800
Antimony, mg/kg dw	13.6UN	12.8UN	12.6UN	13.7UN
Barium, mg/kg dw	213	194	1360	208
Beryllium, mg/kg dw	1.4U	1.3U	1.3U	1.4U
Cadmium, mg/kg dw	1.4U	1.3U	1.3U	1.4U
Calcium, mg/kg dw	15700	15500	21300	22400
Chromium, mg/kg dw	4.1	7.8	3.9	17.8
Cobalt, mg/kg dw	2.7U	5.9B	2.5U	8.4B
Copper, mg/kg dw	52.9N*	9.7N*	6.3UN*	19.4N*
Iron, mg/kg dw	1790	11800	1400	21700
Magnesium, mg/kg dw	384B	6570	705B	9440
Manganese, mg/kg dw	10.1	259	88.1	782
Nickel, mg/kg dw	10.8UN*	113N*	71.9N*	24.7N*
Potassium, mg/kg dw	993B	1090B	975B	2280
Silver, mg/kg dw	2.7U	2.6U	2.5U	2.7U
Sodium , mg/kg dw	136U	332B	226B	303B
Vanadium, mg/kg dw	7.7B	15.6	131	35.4
Zinc, mg/kg dw	6.4EN	35.6EN	756EN	77.0EN
Date Analyzed	11.19.91	11.19.91	11.19.91	11.19.91
Mercury (7471)				
Mercury , mg/kg dw	0.020	0.010	0.010	0.030
Date Analyzed	11.14.91	11.14.91	11.14.91	11.14.91

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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
36621-3	GML5 (7-8.5')	10-15-91
36621-4	GML4 (8-10')	10-15-91
36621-5	GML2 (8-10')	10-15-91
36621-6	GML3 (9-11')	10-16-91

PARAMETER	36621-3	36621-4	36621-5	36621-6
Benzo(a)pyrene, ug/kg dw	450U	420U	4200U	70J/220J
Indeno (1,2,3-cd)pyrene, ug/kg dw	450U	420U	4200U	460U/110J
Dibenzo(a,h)anthracene, ug/kg dw	450U	420U	4200U	460U/27J
Benzo(g,h,i)perylene, ug/kg dw	450U	420U	4200U	460U/49J
Date Extracted	10.23.91	10.23.91	10.23.91	10.23-11.1
Date Analyzed	10.24.91	10.24.91	10.28.91	10.24-11.1

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D253

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Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
36621-3	GML5 (7-8.5')	10-15-91
36621-4	GML4 (8-10')	10-15-91
36621-5	GML2 (8-10')	10-15-91
36621-6	GML3 (9-11')	10-16-91

PARAMETER	36621-3	36621-4	36621-5	36621-6
Fluorene, ug/kg dw	450U	420U	4200U	460U/79J
4-Nitroaniline, ug/kg dw	2300U	2100U	21000U	2300U/*D
4,6-Dinitro-2-methylphenol, ug/kg dw	2300U	2100U	21000U	2300U/*D
N-Nitrosodiphenylamine/Diphenylamine, ug/kg dw	450U	420U	4200U	460U/450U
4-Bromophenyl-phenyl-ether, ug/kg dw	450U	420U	4200U	460U/450U
Hexachlorobenzene, ug/kg dw	450U	420U	4200U	460U/450U
Pentachlorophenol, ug/kg dw	2300U	2100U	21000U	2300U/*D
Phenanthrene, ug/kg dw	450U	420U	4200U	91J/420J
Anthracene, ug/kg dw	450U	420U	4200U	28J/150J
Di-n-butylphthalate, ug/kg dw	450U	420U	4200U	460U/450U
Fluoranthene, ug/kg dw	450U	420U	4200U	130J/520
Pyrene, ug/kg dw	450U	420U	4200U	130J/420J
Butylbenzylphthalate, ug/kg dw	450U	420U	4200U	460U/450U
3,3'-Dichlorobenzidine, ug/kg dw	900U	840U	8400U	910U/910U
Benzo(a)anthracene, ug/kg dw	450U	420U	4200U	75J/260J
bis(2-Ethylhexyl) phthalate, ug/kg dw	44BJ	17BJ	4200U	2200B/450U
Chrysene, ug/kg dw	450U	420U	4200U	76J/300J
Di-n-octylphthalate, ug/kg dw	450U	420U	4200U	460U/450U
Benzo(b)fluoranthene, ug/kg dw	450U	420U	4200U	58J/190J
Benzo(k)fluoranthene, ug/kg dw	450U	420U	4200U	460U/190J

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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
36621-3	GML5 (7-8.5')	10-15-91
36621-4	GML4 (8-10')	10-15-91
36621-5	GML2 (8-10')	10-15-91
36621-6	GML3 (9-11')	10-16-91

PARAMETER	36621-3	36621-4	36621-5	36621-6
Naphthalene, ug/kg dw	450U	420U	4200U	460U/96J
4-Chloroaniline, ug/kg dw	450U	420U	49000	320J/43J
Hexachlorobutadiene, ug/kg dw	450U	420U	4200U	460U/450J
4-Chloro-3-methylphenol, ug/kg dw	450U	420U	4200U	460U/450U
2-Methylnaphthalene, ug/kg dw	450U	420U	3100J	460U/21J
Hexachlorocyclopentadiene, ug/kg dw	450U	420U	4200U	460U/450U
2,4,6-Trichlorophenol, ug/kg dw	450U	420U	4200U	460U/450U
2,4,5-Trichlorophenol, ug/kg dw	2300U	2100U	21000U	2300U/*D
2-Chloronaphthalene, ug/kg dw	450U	420U	4200U	460U/450U
2-Nitroaniline, ug/kg dw	2300U	2100U	21000U	2300U/*D
Dimethylphthalate, ug/kg dw	450U	420U	4200U	460U/450U
Acenaphthylene, ug/kg dw	450U	420U	4200U	460U/450U
3-Nitroaniline, ug/kg dw	2300U	2100U	21000U	2300U/*D
Acenaphthene, ug/kg dw	450U	420U	4200U	460U/83J
2,4-Dinitrophenol, ug/kg dw	2300U	2100U	21000U	2300U/*D
4-Nitrophenol, ug/kg dw	2300U	2100U	21000U	2300U/*D
Dibenzofuran, ug/kg dw	450U	420U	4200U	460U/42J
2,4-Dinitrotoluene, ug/kg dw	450U	420U	4200U	460U/450U
2,6-Dinitrotoluene, ug/kg dw	450U	420U	4200U	460U/450U
Diethylphthalate, ug/kg dw	450U	420U	4200U	460U/450U
4-Chlorophenyl-phenyl ether, ug/kg dw	450U	420U	4200U	460U/450U

SL SAVANNAH LABORATORIES & ENVIRONMENTAL SERVICES, INC.

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D255

LOG NO: S1-36621

Received: 17 OCT 91

Mr. Brian Blum
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125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS01/LTO#06490/DEAD DR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
36621-3	GML5 (7-8.5')	10-15-91
36621-4	GML4 (8-10')	10-15-91
36621-5	GML2 (8-10')	10-15-91
36621-6	GML3 (9-11')	10-16-91

PARAMETER	36621-3	36621-4	36621-5	36621-6
Semivolatiles (8270)				
Phenol, ug/kg dw	450U	420U	16000	460U/450U
bis(2-Chloroethyl) ether, ug/kg dw	450U	420U	4200U	460U/450U
2-Chlorophenol, ug/kg dw	450U	420U	2600J	460U/13J
1,3-Dichlorobenzene, ug/kg dw	450U	420U	4200U	460U/450U
1,4-Dichlorobenzene, ug/kg dw	450U	420U	13000	28J/18J
Benzyl alcohol, ug/kg dw	450U	420U	4200U	460U/450U
1,2-Dichlorobenzene, ug/kg dw	450U	420U	3400J	460U/10J
2-Methylphenol (o-cresol), ug/kg dw	450U	420U	4200U	460U/450U
Bis(2-chloroisopropyl)ether, ug/kg dw	450U	420U	4200U	460U/450U
4-Methylphenol (p-cresol), ug/kg dw	450U	420U	7100	460U/450U
N-Nitroso-di-n-propylamine, ug/kg dw	450U	420U	4200U	460U/450U
Hexachloroethane, ug/kg dw	450U	420U	4200U	460U/450U
Nitrobenzene, ug/kg dw	450U	420U	4200U	460U/450U
Isophorone, ug/kg dw	450U	420U	4200U	460U/450U
2-Nitrophenol, ug/kg dw	450U	420U	4200U	460U/450U
2,4-Dimethylphenol, ug/kg dw	450U	420U	4200U	460U/450U
Benzoic acid, ug/kg dw	2300U	2100U	21000U	2300U/*D
bis(2-Chloroethoxy) methane, ug/kg dw	450U	420U	4200U	460U/450U
2,4-Dichlorophenol, ug/kg dw	450U	420U	11000	460U/450U
1,2,4-Trichlorobenzene, ug/kg dw	450U	420U	4200U	460U/450U

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D25L

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LOG NO: S1-36621

Received: 17 OCT 91

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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
36621-3	GML5 (7-8.5')	10-15-91
36621-4	GML4 (8-10')	10-15-91
36621-5	GML2 (8-10')	10-15-91
36621-6	GML3 (9-11')	10-16-91

PARAMETER	36621-3	36621-4	36621-5	36621-6
Trichloroethene, ug/kg dw	7.0U	6.0U	16000U	7.0U
Dibromochloromethane, ug/kg dw	7.0U	6.0U	16000U	7.0U
1,1,2-Trichloroethane, ug/kg dw	7.0U	6.0U	16000U	7.0U
Benzene, ug/kg dw	7.0U	6.0U	5700J	7.0U
Cis-1,3-Dichloropropene, ug/kg dw	7.0U	6.0U	16000U	7.0U
Bromoform, ug/kg dw	7.0U	6.0U	16000U	7.0U
2-Hexanone, ug/kg dw	14U	13U	32000U	14U
4-Methyl-2-pentanone, ug/kg dw	14U	13U	32000U	14U
Tetrachloroethene, ug/kg dw	7.0U	6.0U	16000U	7.0U
Toluene, ug/kg dw	7.0U	6.0U	400000	7.0U
Chlorobenzene, ug/kg dw	30	12	3600J	66
Ethylbenzene, ug/kg dw	7.0U	6.0U	16000U	7.0U
Styrene, ug/kg dw	7.0U	6.0U	16000U	7.0U
Xylenes, ug/kg dw	7.0U	6.0U	11000J	7.0U
Date Analyzed	10.29.91	10.29.91	10.31.91	10.29.91

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D257

LOG NO: S1-36621

Received: 17 OCT 91

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Project: SDG#GMS01/LTO#06490/DEAD DR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED
36621-3	GML5 (7-8.5')	10-15-91
36621-4	GML4 (8-10')	10-15-91
36621-5	GML2 (8-10')	10-15-91
36621-6	GML3 (9-11')	10-16-91

PARAMETER	36621-3	36621-4	36621-5	36621-6
Volatiles by GC/MS (8240)				
Chloromethane, ug/kg dw	14U	13U	32000U	14U
Bromomethane, ug/kg dw	14U	13U	32000U	14U
Vinyl Chloride, ug/kg dw	14U	13U	32000U	14U
Chloroethane, ug/kg dw	14U	13U	32000U	14U
Methylene Chloride, ug/kg dw	7.0U	6.0U	8500BJ	7.0U
Acetone, ug/kg dw	14U	13U	32000U	15
Carbon Disulfide, ug/kg dw	7.0U	6.0U	16000U	7.0U
1,1-Dichloroethene, ug/kg dw	7.0U	6.0U	16000U	7.0U
1,1-Dichloroethane, ug/kg dw	7.0U	6.0U	16000U	7.0U
cis/trans-1,2-Dichloroethylene, ug/kg dw	7.0U	6.0U	16000U	7.0U
Chloroform, ug/kg dw	7.0U	6.0U	16000U	7.0U
1,2-Dichloroethane, ug/kg dw	7.0U	6.0U	16000U	7.0U
2-Butanone, ug/kg dw	25B	13U	32000U	23B
1,1,1-Trichloroethane, ug/kg dw	7.0U	6.0U	16000U	7.0U
Carbon Tetrachloride, ug/kg dw	7.0U	6.0U	16000U	7.0U
Vinyl Acetate, ug/kg dw	14U	13U	32000U	13U
Bromodichloromethane, ug/kg dw	7.0U	6.0U	16000U	7.0U
1,1,2,2-Tetrachloroethane, ug/kg dw	7.0U	6.0U	16000U	7.0U
1,2-Dichloropropane, ug/kg dw	7.0U	6.0U	16000U	7.0U
Trans-1,3-Dichloropropene, ug/kg dw	7.0U	6.0U	16000U	7.0U

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0258

LOG NO: S1-36621

Received: 17 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS01/LTO#06490/DEAD DR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED	SDG#
36621-1	GML1 (8-14')	10-16-91	GMS01
36621-2	GML1 (3-8')	10-16-91	

PARAMETER	36621-1	36621-2
Lead (7421)		
Lead, mg/kg dw	106*	664*
Date Analyzed	11.05.91	11.05.91
Selenium (7740)		
Selenium, mg/kg dw	1.2UW	1.2UW
Date Analyzed	11.28.91	11.17.91
Arsenic (7060)		
Arsenic, mg/kg dw	90.9	49.2
Date Analyzed	12.02.91	12.02.91
Thallium (7841)		
Thallium, mg/kg dw	2.5UW	2.3UW
Date Analyzed	11.04.91	11.04.91
Cyanide (9010A)		
Cyanide, Total, mg/kg dw	0.31UN	0.46N
Date Analyzed	10.25.91	10.28.91
Percent Solids, %	87	100

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LOG NO: S1-36621

Received: 17 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS01/LTO#06490/DEAD DR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED	SDG#
36621-1	GML1 (8-14')	10-16-91	GMS01
36621-2	GML1 (3-8')	10-16-91	

PARAMETER	36621-1	36621-2
Metals (6010)		
Aluminum, mg/kg dw	6660	7320
Antimony, mg/kg dw	12.3UN	11.6UN
Barium, mg/kg dw	235	1440
Beryllium, mg/kg dw	1.2U	1.2U
Cadmium, mg/kg dw	1.2U	42.0
Calcium, mg/kg dw	18200	75500
Chromium, mg/kg dw	11	27.0
Cobalt, mg/kg dw	7.3B	8.3B
Copper, mg/kg dw	96.1N*	308N*
Iron, mg/kg dw	12400	24000
Magnesium, mg/kg dw	7210	5150
Manganese, mg/kg dw	269	535
Nickel, mg/kg dw	473N*	95.9N*
Potassium, mg/kg dw	1390	1130B
Silver, mg/kg dw	2.5U	2.3U
Sodium , mg/kg dw	347B	295B
Vanadium, mg/kg dw	19.7	27.6
Zinc, mg/kg dw	364EN	4240EN
Date Analyzed	11.19.91	11.19.91
Mercury (7471)		
Mercury , mg/kg dw	0.19	1.8
Date Analyzed	11.14.91	11.14.91

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LOG NO: S1-36621

Received: 17 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS01/LTO#06490/DEAD DR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED	SDG#
36621-1	GML1 (8-14')	10-16-91	GMS01
36621-2	GML1 (3-8')	10-16-91	

PARAMETER	36621-1	36621-2
Aroclor-1232, ug/kg dw	18000U	160000U
Aroclor-1242, ug/kg dw	18000U	160000U
Aroclor-1248, ug/kg dw	18000U	120000J
Aroclor-1254, ug/kg dw	36000U	310000U
Aroclor-1260, ug/kg dw	16000J	380000
Date Extracted	10.28.91	10.28.91
Date Analyzed	12.09.91	12.09.91

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LOG NO: S1-36621

Received: 17 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS01/LTO#06490/DEAD DR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED	SDG#
36621-1	GML1 (8-14')	10-16-91	GMS01
36621-2	GML1 (3-8')	10-16-91	

PARAMETER	36621-1	36621-2
Pesticides (8080)		
alpha-BHC, ug/kg dw	1800U	16000U
beta-BHC, ug/kg dw	1800U	16000U
delta-BHC, ug/kg dw	1800U	16000U
gamma-BHC, ug/kg dw	1800U	16000U
Heptachlor, ug/kg dw	1800U	16000U
Aldrin, ug/kg dw	1800U	16000U
Heptachlor epoxide, ug/kg dw	1800U	16000U
Endosulfan I, ug/kg dw	1800U	16000U
Dieldrin, ug/kg dw	3600U	31000U
4,4'-DDE, ug/kg dw	3600U	31000U
Endrin, ug/kg dw	3600U	31000U
Endosulfan II, ug/kg dw	3600U	31000U
4,4'-DDD, ug/kg dw	3600U	31000U
Endosulfan sulfate, ug/kg dw	3600U	31000U
4,4'-DDT, ug/kg dw	3600U	31000U
Endrin ketone, ug/kg dw	3600U	31000U
Methoxychlor, ug/kg dw	18000U	160000U
alpha-Chlordane, ug/kg dw	18000U	160000U
gamma-Chlordane, ug/kg dw	18000U	160000U
Toxaphene, ug/kg dw	36000U	310000U
Aroclor-1016, ug/kg dw	18000U	160000U
Aroclor-1221, ug/kg dw	18000U	160000U

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LOG NO: S1-36621

Received: 17 OCT 91

Mr. Brian Blum
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125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS01/LTO#06490/DEAD DR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED	SDG#
36621-1	GML1 (8-14')	10-16-91	GMS01
36621-2	GML1 (3-8')	10-16-91	

PARAMETER	36621-1	36621-2
4-Bromophenyl-phenyl-ether, ug/kg dw	3800U	3300U
Hexachlorobenzene, ug/kg dw	3800U	4800
Pentachlorophenol, ug/kg dw	29000	28000
Phenanthrene, ug/kg dw	3800U	23000
Anthracene, ug/kg dw	3800U	4200
Di-n-butylphthalate, ug/kg dw	3800U	1800J
Fluoranthene, ug/kg dw	3800U	16000
Pyrene, ug/kg dw	3800U	23000
Butylbenzylphthalate, ug/kg dw	3800U	5400
3,3'-Dichlorobenzidine, ug/kg dw	7700U	6700U
Benzo(a)anthracene, ug/kg dw	3800U	8600
bis(2-Ethylhexyl) phthalate, ug/kg dw	3800U	3300U
Chrysene, ug/kg dw	3800U	8200
Di-n-octylphthalate, ug/kg dw	3800U	3300U
Benzo(b)fluoranthene, ug/kg dw	3800U	5400
Benzo(k)fluoranthene, ug/kg dw	3800U	4600
Benzo(a)pyrene, ug/kg dw	3800U	5300
Indeno (1,2,3-cd)pyrene, ug/kg dw	3800U	2900J
Dibenzo(a,h)anthracene, ug/kg dw	3800U	3300U
Benzo(g,h,i)perylene, ug/kg dw	3800U	3200J
Date Extracted	10.23.91	10.23.91
Date Analyzed	10.28-30	10.28-30

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LOG NO: S1-36621

Received: 17 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS01/LTO#06490/DEAD DR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED	SDG#
36621-1	GML1 (8-14')	10-16-91	GMS01
36621-2	GML1 (3-8')	10-16-91	

PARAMETER	36621-1	36621-2
Hexachlorobutadiene, ug/kg dw	3800U	3300U
4-Chloro-3-methylphenol, ug/kg dw	3800U	3300U
2-Methylnaphthalene, ug/kg dw	1600J	2300J
Hexachlorocyclopentadiene, ug/kg dw	3800U	3300U
2,4,6-Trichlorophenol, ug/kg dw	3800U	1500J
2,4,5-Trichlorophenol, ug/kg dw	19000U	17000U
2-Chloronaphthalene, ug/kg dw	3800U	3300U
2-Nitroaniline, ug/kg dw	19000U	17000U
Dimethylphthalate, ug/kg dw	3800U	3300U
Acenaphthylene, ug/kg dw	3800U	280J
3-Nitroaniline, ug/kg dw	19000U	17000U
Acenaphthene, ug/kg dw	3800U	3100J
2,4-Dinitrophenol, ug/kg dw	19000U	17000U
4-Nitrophenol, ug/kg dw	19000U	17000U
Dibenzofuran, ug/kg dw	3800U	3000J
2,4-Dinitrotoluene, ug/kg dw	3800U	3300U
2,6-Dinitrotoluene, ug/kg dw	3800U	3300U
Diethylphthalate, ug/kg dw	3800U	1000J
4-Chlorophenyl-phenyl ether, ug/kg dw	3800U	3300U
Fluorene, ug/kg dw	3800U	5000
4-Nitroaniline, ug/kg dw	19000U	17000U
4,6-Dinitro-2-methylphenol, ug/kg dw	19000U	17000U
N-Nitrosodiphenylamine/Diphenylamine, ug/kg dw	3800U	3300U

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Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED	SDG#
36621-1	GML1 (8-14')	10-16-91	GMS01
36621-2	GML1 (3-8')	10-16-91	

PARAMETER	36621-1	36621-2
Semivolatiles (8270)		
Phenol, ug/kg dw	13000	13000
bis(2-Chloroethyl) ether, ug/kg dw	3800U	3300U
2-Chlorophenol, ug/kg dw	3800U	3300U
1,3-Dichlorobenzene, ug/kg dw	3800U	4300
1,4-Dichlorobenzene, ug/kg dw	3200J	93000E/*B
Benzyl alcohol, ug/kg dw	3800U	3300U
1,2-Dichlorobenzene, ug/kg dw	2900J	7700
2-Methylphenol (o-cresol), ug/kg dw	3800U	3300U
Bis(2-chloroisopropyl)ether, ug/kg dw	3800U	3300U
4-Methylphenol (p-cresol), ug/kg dw	5500	3200J
N-Nitroso-di-n-propylamine, ug/kg dw	3800U	3300U
Hexachloroethane, ug/kg dw	3800U	3300U
Nitrobenzene, ug/kg dw	3800U	3300U
Isophorone, ug/kg dw	3800U	3300U
2-Nitrophenol, ug/kg dw	3800U	3300U
2,4-Dimethylphenol, ug/kg dw	3800U	3300U
Benzoic acid, ug/kg dw	19000U	17000U
bis(2-Chloroethoxy) methane, ug/kg dw	3800U	3300U
2,4-Dichlorophenol, ug/kg dw	3800U	2400J
1,2,4-Trichlorobenzene, ug/kg dw	5500	73000E/*C
Naphthalene, ug/kg dw	3800U	7300
4-Chloroaniline, ug/kg dw	270000E/*A	13000

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LOG NO: S1-36621

Received: 17 OCT 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS01/LTO#06490/DEAD DR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED	SDG#
36621-1	GML1 (8-14')	10-16-91	GMS01
36621-2	GML1 (3-8')	10-16-91	

PARAMETER	36621-1	36621-2
1,1,2-Trichloroethane, ug/kg dw	2900U	630U
Benzene, ug/kg dw	2900U	630U
Cis-1,3-Dichloropropene, ug/kg dw	2900U	630U
Bromoform, ug/kg dw	2900U	630U
2-Hexanone, ug/kg dw	5800U	1300U
4-Methyl-2-pentanone, ug/kg dw	5800U	1300U
Tetrachloroethene, ug/kg dw	2900U	630U
Toluene, ug/kg dw	32000	4500
Chlorobenzene, ug/kg dw	900J	5300
Ethylbenzene, ug/kg dw	2900U	630U
Styrene, ug/kg dw	2900U	630U
Xylenes, ug/kg dw	2900U	540J
Date Analyzed	10.31.91	10.31.91

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LOG NO: S1-36621

Received: 17 OCT 91

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Plainview, NY 11803

Project: SDG#GMS01/LTO#06490/DEAD DR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE SAMPLED	SDG#
36621-1	GML1 (8-14')	10-16-91	GMS01
36621-2	GML1 (3-8')	10-16-91	

PARAMETER	36621-1	36621-2
Volatiles by GC/MS (8240)		
Chloromethane, ug/kg dw	5800U	1300U
Bromomethane, ug/kg dw	5800U	1300U
Vinyl Chloride, ug/kg dw	5800U	1300U
Chloroethane, ug/kg dw	5800U	1300U
Methylene Chloride, ug/kg dw	3100B	890B
Acetone, ug/kg dw	5800U	1300U
Carbon Disulfide, ug/kg dw	2900U	630U
1,1-Dichloroethene, ug/kg dw	2900U	630U
1,1-Dichloroethane, ug/kg dw	2900U	630U
cis/trans-1,2-Dichloroethylene, ug/kg dw	2900U	630U
Chloroform, ug/kg dw	2900U	630U
1,2-Dichloroethane, ug/kg dw	2900U	630U
2-Butanone, ug/kg dw	5800U	1300U
1,1,1-Trichloroethane, ug/kg dw	2900U	630U
Carbon Tetrachloride, ug/kg dw	2900U	630U
Vinyl Acetate, ug/kg dw	5800U	1300U
Bromodichloromethane, ug/kg dw	2900U	630U
1,1,2,2-Tetrachloroethane, ug/kg dw	2900U	630U
1,2-Dichloropropane, ug/kg dw	2900U	630U
Trans-1,3-Dichloropropene, ug/kg dw	2900U	630U
Trichloroethene, ug/kg dw	2900U	630U
Dibromochloromethane, ug/kg dw	2900U	630U

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D267

LOG NO: S1-37266

Received: 06 NOV 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS04/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
37266-6	Method Blank-Soil
37266-7	% RPD for MS/MSD

PARAMETER	37266-6	37266-7
Lead (7421)		
Lead, mg/kg dw	0.60U	---
Date Analyzed	12.03.91	---
Selenium (7740)		
Selenium, mg/kg dw	1.0U	22 %
Date Analyzed	12.07.91	---
Arsenic (7060)		
Arsenic, mg/kg dw	2.0U	39 %
Date Analyzed	12.06.91	---
Thallium (7841)		
Thallium, mg/kg dw	2.0U	8.9 %
Date Analyzed	11.29.91	---
Cyanide (9010A)		
Cyanide, Total, mg/kg dw	0.25U	0 %
Date Analyzed	11.15.91	---

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LOG NO: S1-37266

Received: 06 NOV 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS04/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
37266-6	Method Blank-Soil
37266-7	% RPD for MS/MSD

PARAMETER	37266-6	37266-7
Metals (6010)		
Aluminum, mg/kg dw	40.0U	---
Antimony, mg/kg dw	10.0U	8.7 %
Barium, mg/kg dw	2.0U	---
Beryllium, mg/kg dw	1.0U	1.1 %
Cadmium, mg/kg dw	1.0U	7.6 %
Calcium, mg/kg dw	10.0U	---
Chromium, mg/kg dw	2.0U	39 %
Cobalt, mg/kg dw	2.0U	2.1 %
Copper, mg/kg dw	5.0U	---
Iron, mg/kg dw	10.0U	---
Magnesium, mg/kg dw	10.0U	---
Manganese, mg/kg dw	2.0U	1.1 %
Nickel, mg/kg dw	8.0U	---
Potassium, mg/kg dw	200U	---
Silver, mg/kg dw	2.0U	22 %
Sodium , mg/kg dw	100U	---
Vanadium, mg/kg dw	2.0U	3.0 %
Zinc, mg/kg dw	4.0U	---
Date Analyzed	11.26.91	---
Mercury (7471)		
Mercury , mg/kg dw	0.010U	66 %
Date Analyzed	11.21.91	---

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D269

LOG NO: S1-37266

Received: 06 NOV 91

Mr. Brian Blum
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS04/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
37266-6	Method Blank-Soil
37266-7	% RPD for MS/MSD

PARAMETER	37266-6	37266-7
Pesticides (8080)		
Aroclor-1016, ug/kg dw	80U	---
Aroclor-1221, ug/kg dw	80U	---
Aroclor-1232, ug/kg dw	80U	---
Aroclor-1242, ug/kg dw	80U	---
Aroclor-1248, ug/kg dw	80U	---
Aroclor-1254, ug/kg dw	160U	---
Aroclor-1260, ug/kg dw	160U	---
Date Extracted	11.12.91	---
Date Analyzed	12.04.91	---

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LOG NO: S1-37266

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Mr. Brian Blum
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125 East Bethpage Road
Plainview, NY 11803

Project: SDG#GMS04/LTO#06490/DEAD CR.
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES
37266-6	Method Blank-Soil
37266-7	% RPD for MS/MSD

PARAMETER	37266-6	37266-7
Hexachlorobenzene, ug/kg dw	330U	---
Pentachlorophenol, ug/kg dw	1700U	1 %
Phenanthrene, ug/kg dw	330U	---
Anthracene, ug/kg dw	330U	---
Di-n-butylphthalate, ug/kg dw	330U	---
Fluoranthene, ug/kg dw	330U	---
Pyrene, ug/kg dw	330U	---
Butylbenzylphthalate, ug/kg dw	9.0J	---
3,3'-Dichlorobenzidine, ug/kg dw	670U	---
Benzo(a)anthracene, ug/kg dw	330U	---
bis(2-Ethylhexyl) phthalate, ug/kg dw	9.0J	---
Chrysene, ug/kg dw	330U	---
Di-n-octylphthalate, ug/kg dw	330U	---
Benzo(b)fluoranthene, ug/kg dw	330U	---
Benzo(k)fluoranthene, ug/kg dw	330U	---
Benzo(a)pyrene, ug/kg dw	330U	---
Indeno (1,2,3-cd)pyrene, ug/kg dw	330U	---
Dibenzo(a,h)anthracene, ug/kg dw	330U	---
Benzo(g,h,i)perylene, ug/kg dw	330U	---
3-Nitroaniline, ug/kg dw	1700U	---
Date Extracted	11.06.91	---
Date Analyzed	11.16.91	---

APPENDIX E

DATA VALIDATION MEMORANDA

E1

MEMORANDUM

TO: Brian Blum

FROM: Lauren Sjogren

DATE: February 10, 1992

SUBJECT: Data Validation of the Sediment/Fill Borings Collected for a Site Investigation for Dead Creek Sector B, and Sites L and M, Sauget-Cahokia, Illinois

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A sediment/fill boring program was conducted at Dead Creek Sector B and Sites L and M, Sauget-Cahokia, Illinois from October 16 through November 5, 1991. All sediment/fill samples were collected in accordance with the Geraghty & Miller, Inc. Work Plan (September 1991).

Thirteen samples were analyzed by Savannah Laboratories for the Target Compound List/Target Analyte List (TCL/TAL) parameters. In addition, 26 samples were analyzed for one or more of the following: TAL metals, TCL polychlorinated biphenyls (PCBs), TCL volatiles, TCL semivolatiles, and toxicity characteristic leaching procedure (TCLP) parameters. Validation of the data was performed following the quality assurance/quality control (QA/QC) criteria set forth in the methods used to analyze the samples, the United States Environmental Protection Agency (USEPA) Laboratory Data Validation Functional Guidelines for Evaluating Organic Analyses, February 1988 and the United States Environmental Protection Agency (USEPA) Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses, July 1988. Samples GML1 (8-14'), PB-B1 (0-2'), PC-B2 (1.5-3.5'), and M1 (0-3') were validated with the results discussed below. All the other samples were reviewed with the results discussed in a separate memorandum.

The quality of the data presented in the data package is acceptable with the qualifications described below.

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Savannah Laboratories Project Numbers 136621, 136674, 137031, 136697, 137055, and 137266.

ORGANIC DATA VALIDATION REVIEW

I. HOLDING TIMES

Volatiles: Samples GML1 (8-14') and PB-B1 (0-2') were analyzed outside the Contract Laboratory Program (CLP) holding time of 10 days from verified time of sample receipt (VTSR). All compounds detected in these two samples were qualified as estimated (J) and all compounds not detected were qualified as estimated (UJ).

Semivolatiles: The reanalysis of sample PB-B1 (0-2'), labeled PB-B1 (0-2')RE, was performed outside the CLP analysis holding time of 40 days from time of extraction. All compounds detected in sample PB-B1 (0-2')RE were qualified as estimated (J) and all compounds not detected were qualified as estimated (UJ). All other extractions and analyses were performed within the proper holding times.

Pesticides/PCBs: Sample GML1 (8-14') was extracted and analyzed outside the CLP holding time of 10 days from VTSR and 40 days from time of extraction, respectively. Sample PB-B1 (0-2') was analyzed outside the CLP holding time of 40 days from time of extraction. All compounds detected in these samples were qualified as estimated (J) and all compounds not detected were qualified as estimated (UJ).

PCBs: All extractions and analyses were performed within the proper holding times.

IIA. GC/MS TUNING

Volatiles: Each set of tuning data met the required ion abundance criteria. All samples were analyzed within the 12-hour tune time limit.

Semivolatiles: Each set of tuning data met the required ion abundance criteria. All samples were analyzed within the 12-hour tune time limit.

IIB. PESTICIDES INSTRUMENT PERFORMANCE

Pesticide/PCBs: To evaluate the performance of the gas chromatograph (GC) instruments used to analyze the samples, the following was reviewed:

- 4,4'-DDT retention times
- retention time windows
- 4,4'-DDT/Endrin degradation
- Dibutylchlorendate (DBC) retention times

Since samples GML1 (8-14') and PB-B1 (0-2') were diluted by a factor of 200 and 1,000, respectively, the retention time of DBC was not reported. However, DBC is listed in the raw data of these two samples and the data reviewer checked the DBC retention times against the standard retention times and found them to be acceptable. All other items listed above were reviewed and found to be acceptable.

PCBs: To evaluate the performance of the GC instruments used to analyzed the samples, the following was reviewed:

- retention time windows
- 4,4'-DDT/Endrin degradation
- Dibutylchlorendate (DBC) retention times

The retention time of Aroclor-1016 was found outside the retention time window for the continuing calibration standard analyzed on December 4, 1991 at 05:48 using GC column SPB-5. Since none of the samples were associated with this standard, no qualification of the data was performed.

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Since sample M1 (0-3')DL was diluted by a factor of 50, the retention time of DBC was not reported. However, DBC is listed in the raw data of this sample and the data reviewer checked the DBC retention times against the standard retention times and found them to be acceptable. All 4,4'-DDT/Endrin breakdown checks were reviewed and found to be acceptable.

III. CALIBRATION

A. Initial Calibration

Volatiles: One initial calibration was performed with all compound relative response factors (RRF) > 0.05 and all compound percent relative standard deviations (%RSD) < 30% except for vinyl acetate. The %RSD for vinyl acetate was 37.3. Since vinyl acetate was not detected in the associated samples, no qualification of the data was necessary.

Semivolatiles: Two initial calibrations were performed with all RRFs > 0.05. The following compound %RSDs were > 30%:

Calibration Date: 10/18/91

Compound	%D
Benzoic acid	36.7
2,4-Dinitrophenol	30.9

Calibration Date: 12/06/91

Compound	%D
2,4-Dinitrophenol	36.0
4-Nitrophenol	39.4
Benzo(k)fluoranthene	41.6

Since the compounds listed above were not detected in the associated samples, no qualification of the data was necessary.

Pesticides/PCBs: All initial calibration requirements were met.

PCBs: All initial calibration requirements were met.

B. Continuing Calibration

Volatiles: For the continuing calibration standard analyzed along with the samples, all RRFs were > 0.05 and the following compound percent differences were > 25%:

Compound	%D
Chloromethane	62.1
Chloroethane	51.0
Carbon disulfide	37.6
Vinyl acetate	54.6
trans-1,3-Dichloropropene	87.9
4-Methyl-2-pentanone	35.1
2-Hexanone	34.4

Since the compounds listed above were not detected in the associated samples, no qualification of the data was necessary.

Semivolatiles: Four continuing calibrations were performed with all RRFs > 0.05. The following compound %Ds were > 25%:

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Calibration Date: 10/24/91

Compound	%D
2-Methylphenol	33.1
bis(2-Chloroisopropyl)ether	68.8
4-Methylphenol	41.1
Benzoic acid	54.7
2,4,6-Trichlorophenol	49.7
3-Nitroaniline	28.1
4-Nitrophenol	27.2
Butylbenzylphthalate	28.3
Dibenz(a,h)anthracene	29.0

Calibration Date: 10/28/91

Compound	%D
2-Methylphenol	38.9
bis(2-Chloroisopropyl)ether	49.4
4-Methylphenol	39.6
2,4,6-Trichlorophenol	59.2
2,4-Dinitrophenol	37.9
4-Nitroaniline	35.4
3,3'-Dichlorobenzidine	35.3

Calibration Date: 10/30/91

Compound	%D
2-Methylphenol	32.5
bis(2-Chloroisopropyl)ether	43.1
4-Methylphenol	26.8
2,4,5-Trichlorophenol	60.9
2,4-Dinitrophenol	30.9
3,3'-Dichlorobenzidine	38.9

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Calibration Date: 12/09/91

Compound	%D
2,4-Dinitrophenol	35.3
4-Nitrophenol	27.5
4-Nitroaniline	28.9
Benzo(k)fluoranthene	53.1

The following sample results were qualified as estimated (J) based on the continuing calibration results:

Sample ID	Compound	Concentrations in Micrograms per Kilogram (ug/kg)
GML1 (8-14')	4-Methylphenol	5500J
GML1 (8-14')DL	4-Methylphenol	4700JD
PB-B1 (0-2')	2,4,6-Trichlorophenol	1300J

The "D" qualifier indicates that the sample was analyzed at a secondary dilution factor.

Pesticides/PCBs: All continuing calibration requirements were met.

PCBs: All continuing calibration requirements were met.

IV. BLANK RESULTS

Volatiles: One method blank was analyzed with the following compounds detected:

Compound	Concentration (ug/kg)
Methylene chloride	930
2-Butanone	1800

The following sample results were qualified as not detected (U) based on the associated method blank results:

Sample ID	Compound	Concentration (ug/kg)
GML1 (8-14')	Methylene chloride	3100U
PB-B1 (0-2')	Methylene chloride	1300U
PB-B1 (0-2')	2-Butanone	3700U

No compounds were detected in the equipment blank associated with sample GML1 (8-14'). Methylene chloride at a concentration of 10 micograms per liter (ug/L) was detected in the equipment blank associated with sample PB-B1 (0-2'). No further qualification of sample PB-B1 (0-2') was necessary since methylene choride was already qualified based on the method blank results.

Semivolatiles: One method blank was extracted and analyzed with the following compound detected:

Method Blank: SBLK01

Compound	Concentration (ug/kg)
bis(2-Ethylhexyl)phthalate	2900

bis(2-Ethylhexyl)phthalate was detected in this blank at a concentration higher than allowed by the method criteria; therefore, bis(2-ethylhexyl)phthalate detected in sample PB-B1 (0-2') was qualified as unusable (R). Since bis(2-ethylhexyl)phthalate was not detected in sample GML1 (8-14'), in the data reviewer's opinion, no qualification of this result was necessary.

No compounds were detected in the equipment blank associated with sample PB-B1 (0-2'). bis (2-Ethylhexyl)phthalate at an estimated concentration of 1 ug/L was detected in the equipment blank associated with sample GML1 (8-14'). No further qualification of

sample GML1 (8-14') was necessary since bis(2-ethylhexyl)phthalate was not detected in the sample.

Pesticides/PCBs: No compounds were detected in any of the blanks.

PCBs: No compounds were detected in any of the blanks.

V. SURROGATE RECOVERIES

Volatiles: All surrogate spike recoveries were within QC limits.

Semivolatiles: Surrogate spike recoveries were not reported for samples GML1 (8-14') and the dilution and reanalysis of GML1 (8-14'), labeled GML1 (8-14')DL because they were diluted out. Surrogate spike recoveries for the initial analysis and reanalysis of sample PB-B1 (0-2') were within QC limits.

Pesticides/PCBs: Surrogate spike recoveries were not reported for samples GML1 (8-14') and PB-B1 (0-2') because they were diluted out.

PCBs: A surrogate spike recovery was not reported for sample M1 (0-3')DL because it was diluted out. Surrogate spike recoveries were within QC limits for samples M1 (0-3') and PC-B2 (1.5-3.5').

VI. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Volatiles: Sample GML1 (8-14') was designated to be the matrix spike/matrix spike duplicate (MS/MSD) for the Site L samples. Sample PD-B1 (0-1.5') was designated to be the matrix spike/matrix spike duplicate (MS/MSD) for the Dead Creek samples. The data for sample PD-B1 (0-1.5') can be found in SDG GMS02. The results of the MS/MSDs were

reviewed and in the data reviewer's opinion, no qualification of the data was necessary based on the MS/MSD results.

Semivolatiles: Sample GML1 (8-14') was designated to be the matrix spike/matrix spike duplicate (MS/MSD) for the Site L samples. Sample PD-B1 (0-1.5') was designated to be the matrix spike/matrix spike duplicate (MS/MSD) for the Dead Creek samples. The data for sample PD-B1 (0-1.5') can be found in SDG GMS02. Due to sample GML1 (8-14') being diluted because of the high concentration of target compounds found in the sample, little or no matrix spike recoveries were reported. In its place, the laboratory spiked the method blank with all recoveries and RPD values found to be within QC limits. The results of the MS/MSDs were reviewed and in the data reviewer's opinion, no qualification of the data was necessary based on the MS/MSD results.

Pesticides/PCBs: Sample GML1 (8-14') was designated to be the matrix spike/matrix spike duplicate (MS/MSD) for the Site L samples. Sample PD-B1 (0-1.5') was designated to be the matrix spike/matrix spike duplicate (MS/MSD) for the Dead Creek samples. The data for sample PD-B1 (0-1.5') can be found in SDG GMS02. Due to samples GML1 (8-14') and PD-B1 (0-1.5') being diluted because of the high concentration of target compounds found in the samples, little or no matrix spike recoveries were reported. In there place, the laboratory spiked method blanks with all recoveries and RPD values found to be within QC limits. The results of the MS/MSDs were reviewed and in the data reviewer's opinion, no qualification of the data was necessary based on the MS/MSD results.

PCBs: Sample M2 (0-3.5') was designated to be the matrix spike/matrix spike duplicate (MS/MSD) for the Site M samples. Sample PC-B2 (1.5-3.5') was designated to be the matrix spike/matrix spike duplicate (MS/MSD) for the Dead Creek samples. Since more than one aroclor was detected in both these samples, quantitation of the two aroclors used as the spike compounds was difficult. In their place, the laboratory spiked method blanks with all recoveries and RPD values found to be within QC limits. The results of the MS/MSDs were

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reviewed and in the data reviewer's opinion, no qualification of the data was necessary based on the MS/MSD results.

VII. FIELD DUPLICATE

Field duplicates were not collected as part of this sampling program.

VIII. INTERNAL STANDARD PERFORMANCE

Volatiles: All internal standard (IS) area counts and retention times met QC requirements.

Semivolatiles: The following samples had IS area counts outside of QC limits:

Sample ID	Internal Standard
PB-B1 (0-2')	Chrysene-d_{12}
	Perylene-d_{12}
GML1 (8-14')	Chrysene-d_{12}
	Perylene-d_{12}
PB-B1 (0-2')RE	Chrysene-d_{12}

Positive results for the compounds detected in the samples listed above and quantitated using the internal standards listed above were qualified as estimated (J). Non-detects for the samples listed above and quantitated using the internal standards listed above were qualified as estimated (UJ). A listing of compounds, quantitated using internal standards, is found in Table 1.

IX. COMPOUND IDENTIFICATION

Volatiles: All relative retention times met QC requirements and all compounds were reported correctly.

Semivolatiles: All relative retention times met QC requirements and all compounds were reported correctly.

Pesticides/PCBs: All compounds were reported correctly.

PCBs: All compounds were reported correctly.

X. COMPOUND QUANTITATION AND REPORTED DETECTION LIMITS

Volatiles: All compound detection limits were met or adjusted for dilution factors.

Semivolatiles: All compound detection limits were met or adjusted for dilution factors.

Pesticides/PCBs: Sample GML1 (8-14') was diluted by a factor of 200 and analyzed. Aroclor-1260 was the only compound detected in this sample at an estimated concentration of 16000 ug/kg. This sample should have been reanalyzed at a lower dilution factor to bring this compound within the calibration range of the method but was not.

PCBs: All compound detection limits were met of adjusted for dilution factors.

XI. TENTATIVELY IDENTIFIED COMPOUNDS

Volatiles: All tentatively identified compounds were reported correctly.

Semivolatiles: All tentatively identified compounds were reported correctly.

XII. SYSTEM PERFORMANCE

The performance of the instruments during analysis is considered acceptable.

XIII. OVERALL ASSESSMENT OF THE DATA

Volatiles: The data were found to be acceptable with the qualifications described above.

Semivolatiles: The concentration of bis(2-ethylhexyl)phthalate in method blank associated with sample PB-B1 (0-2') was higher than allowed following the method blank criteria. Sample PB-B1 (0-2') should have been reextracted and reanalyzed but was not. Therefore, bis(2-ethylhexyl)phthalate for sample PB-B1 (0-2') was not reported (R).

Sample PB-B1 (0-2') was reanalyzed because area counts for one internal standard were found to be outside QC limits. The sample was reanalyzed with the same internal standard area counts outside QC limits. Since the reanalysis of sample PB-B1 (0-2') was performed beyond the holding time, the initial analysis should be used when reporting the data.

Sample GML1 (8-14') was diluted and reanalyzed because of the high concentration of 4-chloroaniline detected in the sample. The reanalysis of GML1 (8-14') should be used to report the concentration of 4-chloroaniline and the initial analysis should be used to report all the other semivolatile compounds.

The data were found to be acceptable with the qualifications described above.

Pesticides/PCBs: The data were found to be acceptable with the qualifications described above.

PCBs: The data were found to be acceptable with the qualifications described above.

INORGANIC DATA VALIDATION SUMMARY

I. HOLDING TIMES

Sample GML1 (8-14') was analyzed for mercury one day past the functional guidelines holding time of 28 days from time of collection. The mercury concentration reported for sample GML1 (8-14') was qualified as estimated (J). Sample GML1 (8-14') was analyzed for the other inorganic parameters within the functional guidelines specified holding times. Sample PB-B1 (0-2') was analyzed for the inorganic parameters within the functional guidelines specified holding times.

II. CALIBRATION

A. Initial Calibration

A standard with a concentration at the Contract Required Detection Limit (CRDL) was not analyzed as part of the selenium and lead initial calibrations. Since a CRDL standard was analyzed for selenium and lead prior to analyzing any of the samples, in the data reviewer's opinion, no qualification of the data was necessary. All other initial calibration requirements were met.

B. Continuing Calibration

All continuing calibration requirements were met.

III. BLANKS

No analytes were detected in the initial calibration blanks, continuing calibration blanks and the preparation blanks analyzed along with the samples. The following analytes were detected in the equipment blanks:

Equipment Blank-Site L

Analyte	Concentration (ug/L)
Calcium	341B
Iron	151
Sodium	997B

Equipment Blank-Dead Creek 1330

Analyte	Concentration (ug/L)
Barium	40.8B
Calcium	844B
Copper	68.9
Iron	435
Lead	5.5
Magnesium	168B
Sodium	8140
Zinc	140

Equipment Blank-Dead Creek 1500

Analyte	Concentration (ug/L)
Calcium	462B
Iron	98.4B
Sodium	665B
Zinc	375

The "B" qualifier indicates that the concentration is above the instrument detection limit (IDL) and below the CRDL.

The following sample results were qualified as non-detects (U) due to the equipment blank results:

Sample ID	Analyte	Concentration in Milligrams per Kilogram (mg/kg)
GML1 (8-14')	Sodium	347U
PB-B1 (0-2')	Sodium	259U

IV. ICP INTERFERENCE CHECK SAMPLE (ICS)

The percent recoveries for all the ICS analyses were within the control limits of ± 20% of the true value.

V. LABORATORY CONTROL SAMPLE (LCS)

All LCS results were within the control limits.

VI. DUPLICATE SAMPLE ANALYSIS

Sample GML1 (8-14') was designated for the Site L duplicate analysis and samples PD-B1 (0-1.5') and PD-B2 (2-4') were designated for the Dead Creek duplicate analysis. Samples PD-B1 (0-1.5') and PD-B2 (2-4') results can be found in SDG GMS02. For the duplicate analysis of sample GML1 (8-14'), the RPD values for copper, lead, and nickel were found to be outside the control limits. Therefore, the copper, lead, and nickel results for sample GML1 (8-14') were qualified as estimated (J). For the duplicate analysis of sample PD-B1 (0-1.5'), the RPD values for nickel and selenium were found to be outside the control limits. Therefore, the nickel and selenium results for sample PB-B1 (0-2') were qualified as estimated (J). All RPD values were found to be within QC limits in the duplicate analysis of sample PD-B2 (2-4').

VII. MATRIX SPIKE SAMPLE ANALYSIS

Sample GML1 (8-14') designated for the Site L matrix spike analysis and samples PD-B1 (0-1.5') and PD-B2 (2-4') were designated for the Dead Creek matrix spike analysis. Samples PD-B1 (0-1.5') and PD-B2 (2-4') results can be found in SDG GMS02. Sample GML1 matrix spike recoveries were outside of QC limits for antimony, copper, nickel, zinc, and cyanide with recoveries of 43.9, 215.6, 169.7, 10.5 and 34.8, respectively. Therefore, the antimony, copper, nickel, and zinc detected in sample GML1 (8-14') was qualified as

estimated (J) and the non-detect cyanide result was qualified as estimated (UJ). Sample PD-B1 (0-1.5') matrix spike recoveries were outside of QC limits for antimony, cadmium, manganese, selenium, silver, and thallium with recoveries of 66.8, 404.5, 135.7, -143.4, 59.9 and 62.0, respectively. Sample PD-B2 (2-4') matrix spike recoveries were outside QC limits for antimony, arsenic, cadmium, and copper with recoveries of 35.4, 44.8, -76.8, and 175.7, respectively. Therefore, the antimony, arsenic, copper, cadmium, manganese, selenium, and silver detected in sample PB-B1 (0-2') was qualified as estimated (J) and the non-detect antimony and thallium results were qualified as estimated (UJ).

VIII. FURNACE ATOMIC ABSORPTION QC

The metals determined using Furnance Atomic Absorption included: arsenic, lead, selenium, and thallium. Duplicate injections of every sample analyzed for these metals with concentrations greater than the CRDL agreed within ± 20% RSD. The thallium post-digestion spike recoveries for samples GML1 (8-14') and PB-B1 (0-2') were 69% and 71%, respectively, which were below the control limits of 85-115%. The non-detect thallium results for both these samples were qualified as estimated (UJ). The selenium post-digestion spike recovery for sample GML1 (8-14') was 55% which was below the control limits of 85-115%. The non-detect selenium result for this sample was qualified as estimated (UJ). The method of standard additions was performed for the selenium analysis of sample PB-B1 (0-2') with a correlation coefficient of 0.9949 reported. As a result, the selenium detected in sample PB-B1 (0-2') was qualified as estimated (J). All other post-digestion spike recoveries were within the control limits of 85-115%.

IX. ICP SERIAL DILUTION

Sample GML1 (8-14') was designated for the Site L inductively coupled plasma (ICP) serial dilution analysis and sample PH-B2 (2-4') was designated for the Dead Creek ICP serial dilution analysis. Sample PH-B2 (2-4') results can be found in SDG GMS02. For the Site L results, the percent difference between the initial zinc sample concentration and the

zinc serial dilution concentration was 10.9% which exceeds the QC limit of 10%. The zinc result for sample GML1 (8-14') was qualified as estimated (J). All other Site L ICP serial dilution results were acceptable. All Dead Creek ICP serial dilution results were acceptable.

X. SAMPLE RESULT VERIFICATION

No discrepancies were found between the reported results and the QC data package.

XI. FIELD DUPLICATES

Field duplicates were not required.

XII. OVERALL ASSESSMENT OF DATA FOR THE CASE

The QC presented in the data validation package is acceptable with the qualifications listed above.

NY68507:DeadCrk.mem

Table 1. Semivolatile Internal Standards Chrysene-d_{12} and Perylene-d_{12} With Corresponding TCL Analytes Assigned for Quantitation.

Chrysene-d_{12}	Perylene-d_{12}
Pyrene	Di-n-octyl phthalate
Butylbenzyl phthalate	Benzo(b)fluoranthene
3,3'-Dichlorobenzidine	Benzo(k)fluoranthene
Benzo(a)anthracene	Benzo(a)pyrene
bis(2-Ethylhexyl)phthalate	Indeno(1,2,3-cd)pyrene
Chrysene	Dibenz(a,h)anthracene
Terphenyl-d_{14} (surr)	Benzo(g,h,i)perylene

surr Surrogate compound.

NY60507:Deadart.mem

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MEMORANDUM

To: Brian Blum

From: Lauren Sjogren

Date: February 11, 1992

Subject: Review of the Analytical Results of the Sediment/Fill Borings Collected for a Site Investigation for Dead Creek Sector B and Sites L and M, Sauget-Cahokia, Illinios

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A sediment/fill boring program was conducted at Dead Creek Sector B and Sites L and M, Sauget-Cahokia, Illinois from October 16 through November 5, 1991. All sediment/fill samples were collected in accordance with the Geraghty & Miller, Inc. Work Plan (September 1991).

Thirteen samples were analyzed by Savannah Laboratories for the Target Compound List/Target Analyte List (TCL/TAL) parameters. In addition, 26 samples were analyzed for one or more of the following: TAL metals, TCL polychlorinated biphenyls (PCBs), TCL volatiles, TCL semivolatiles and toxicity characteristic leaching procedure (TCLP) parameters. Review of the data was performed following the quality assurance/quality control (QA/QC) criteria set forth in the methods used to analyze the samples, the United States Environmental Protection Agency (USEPA) Laboratory Data Validation Functional Guidelines for Evaluating Organic Analyses, February 1988, and the United States Environmental Protection Agency (USEPA) Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses, July 1988. Four data packages were provided by the laboratory with the samples contained in these data packages listed in Table 1. Samples GML1 (8-14'), PB-B1 (0-2'), PC-B2 (1.5-3.5'), and M1 (0-3') are not discussed below because they were validated, with those results discussed in a separate memorandum. The review of the chemical data included checking the following:

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- Holding times.
- Blank results.
- Surrogate recoveries.
- Matrix spike/matrix spike duplicate results.
- Internal standard results.

The quality of the data presented in the data packages is acceptable with the qualifications described below.

Savannah Laboratories Project Numbers 136621, 136674, 137031, 136697, 137055, and 137266.

ORGANIC DATA REVIEW SUMMARY

I. HOLDING TIMES

Volatiles: All three equipment blanks collected were analyzed outside the seven days from time of collection holding time for aromatic compounds as specified in the USEPA Laboratory Data Validation Functional Guidelines. The following aromatic compounds were analyzed for:

Benzene	Toluene
Chlorobenzene	Ethylbenzene
Xylenes	Styrene

None of the aromatic compounds listed above were detected in any of the equipment blanks, therefore, all aromatic non-detects for the equipment blanks were qualified as estimated (UJ). The following sediment/fill samples were analyzed outside the Contract Laboratory Program (CLP) holding time of 10 days from verified time of sample receipt (VTSR):

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GML4 (8-10')	GML2 (8-10')	GML3 (9-11')
PC-B1 (0-1.5')	PD-B1 (0-1.5')	GML1 (3-8')
PD-B1 (0-1.5')RE	PJ-B2 (0-1.5')DL	GML5 (7-8.5')
M3 (0-8')		

For the samples listed above, all compounds detected were qualified as estimated (J) and all compounds not detected were qualified as estimated (UJ). The "RE" at the end of sample name PD-B1 (0-1.5') indicates that the sample was reanalyzed. The "DL" at the end of sample name PJ-B2 (0-1.5') indicates that the sample was diluted and reanalyzed.

Semivolatiles: The Dead Creek equipment blank was extracted outside the seven days from time of collection holding time as specified in the USEPA Laboratory Data Validation Functional Guidelines. No compounds were detected in this equipment blank, therefore, all non-detects were qualified as estimated (UJ). The reextraction of samples GML3 (9-11') and PA-B1 (0-2'), labeled GML3 (9-11')RX and PA-B1 (0-2')RX, were performed outside the CLP extraction holding time of 10 days from verified time of sample receipt (VTSR). For samples GML3 (9-11')RX and PA-B1 (0-2')RX, all compounds detected were qualified as estimated (J) and all compounds not detected were qualified as estimated (UJ).

Pesticides/PCBs: The Site L equipment blank was analyzed outside the holding time of 40 days from time of extraction and the Dead Creek equipment blank was extracted outside the holing time of seven days from time of collection as specified in the USEPA Functional Guidelines. No compounds were detected in these equipment blanks, therefore, all non-detects were qualified as estimated (UJ). The following sediment/fill samples were extracted and/or analyzed outside the CLP holding times of 10 days from VTSR and 40 days from time of extraction, respectively:

GML1 (3-8')	PA-B1 (0-2')	PC-B1 (0-1.5')
PD-B1 (0-1.5')	PE-B1 (0-2')	PF-B1 (0-2')
PG-B1 (0-2')	PH-B1 (0-2')	

For the samples listed above, all compounds detected were qualified as estimated (J) and all compounds not detected were qualified as estimated (UJ).

PCBs: The Dead Creek equipment blank was extracted outside the seven days from time of collection holding time as specified in the USEPA Laboratory Data Validation Functional Guidelines. No compounds were detected in this equipment blank, therefore, all non-detects were qualified as estimated (UJ). The following sediment/fill samples were extracted outside the CLP holding time of 10 days from VTSR:

PA-B2 (2-4')	PA-B3 (5-6')	PB-B2 (4-6')
PB-B3 (2-4')		

For the samples listed above, all compounds detected were qualified as estimated (J) and all compounds not detected were qualified as estimated (UJ).

II. BLANK RESULTS

Volatiles: For sample delivery group (SDG) GMS01, four method blanks were analyzed with the following compounds detected:

Method Blank: VBLK01

Compound	Concentration in micrograms per liter (ug/L)
Methylene chloride	1.0J
2-Butanone	4.0J

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Method Blank: VBLK02

Compound	Concentration in micrograms per kilogram (ug/kg)
2-Butanone	9J

Method Blank: VBLK04

Compound	Concentration (ug/kg)
Methylene chloride	930
2-Butanone	1800

No compounds were detected in method blank VBLK03. The following sample results were qualified as not detected (U) based on the associated method blank results:

Sample ID	Compound	Concentration (ug/kg)
PA-B1 (0-2')	2-Butanone	56U
GML5 (7-8.5')	2-Butanone	28U
GML3 (9-11')	2-Butanone	23U
GML1 (3-8')	Methylene chloride	890U
GML2 (8-10')	Methylene chloride	16000U

No compounds were detected in the equipment blank associated with the Site L samples. Methylene chloride at a concentration of 10 ug/L was detected in the equipment blank associated with the Dead Creek samples. No further qualification of the Dead Creek samples was necessary since either methylene chloride was not detected or methylene chloride was already qualified based on the method blank results.

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For SDG GMS02, four method blanks were analyzed with the following compounds detected:

Method Blank: VBLK01

Compound	Concentration (ug/kg)
Methylene chloride	17
2-Butanone	28
Acetone	15

Method Blank: VBLK02

Compound	Concentration (ug/kg)
2-Butanone	21
Methylene chloride	2J
Acetone	8J

Method Blank: VBLK04

Compound	Concentration (ug/kg)
Acetone	5J

No compounds were detected in method blank VBLK03. The following sample results were qualified as not detected (U) based on the associated method blank results:

Sample ID	Compound	Concentration	Units
PC-B1 (0-1.5')	Methylene chloride	47U	ug/kg
	Acetone	430U	ug/kg
PD-B1 (0-1.5')	Methylene chloride	94U	ug/kg
	2-Butanone	230U	ug/kg
PE-B1 (0-1.5')	Methylene chloride	64U	ug/kg
	Acetone	890U	ug/kg
Equipment Blank	Acetone	10U	ug/L

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Sample ID	Compound	Concentration	Units
PF-B1 (0-2')	Methylene chloride	61U	ug/kg
	Acetone	350U	ug/kg
	2-Butanone	180U	ug/kg
PG-B1 (0-2')	Methylene chloride	19U	ug/kg
	Acetone	140U	ug/kg
	2-Butanone	81U	ug/kg
PH-B1 (0-2')	Methylene chloride	50U	ug/kg
	Acetone	270U	ug/kg
	2-Butanone	200U	ug/kg

Methylene chloride at a concentration of 10 ug/L was detected in the equipment blank. No further qualification of the Dead Creek samples was necessary since either methylene chloride was not detected in the samples or methylene chloride was already qualified based on the method blank results.

For SDG GMS03, five method blanks were analyzed with the following compounds detected:

Method Blank: VBLK01

Compound	Concentration (ug/kg)
Methylene chloride	3J
2-Butanone	14
Acetone	12

Method Blank: VBLK02

Compound	Concentration (ug/kg)
Methylene chloride	4J

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Method Blank: VBLK03

Compound	Concentration (ug/kg)
Methylene chloride	2J
Acetone	4J

Method Blank: VBLK04

Compound	Concentration (ug/kg)
Acetone	630J

Method Blank: VBLK05

Compound	Concentration (ug/kg)
Methylene chloride	3J

The following sample result was qualified as not detected (U) based on the associated method blank results:

Sample ID	Compound	Concentration	Units
PI-B2 (0-2')	Methylene chloride	37U	ug/kg

Sample PJ-B2 (0-1.5') was initially analyzed as a low level sample with methylene chloride and 2-butanone reported as not detected. This sample was reanalyzed using a medium level extraction due to the high concentration of chlorobenzene detected in the initial analysis. Estimated concentrations of methylene chloride and 2-butanone were detected in the medium level analysis of this sample. Even though methylene chloride and 2-butanone were not detected in the medium level extraction blank, these compounds should be considered laboratory contaminants since they were not originally detected in the low level analysis of the sample.

Methylene chloride at a concentration of 10 ug/L was detected in the equipment blank. No further qualification of the Dead Creek samples was necessary since either

methylene chloride was not detected in the samples or methylene chloride was already qualified based on the method blank results.

For SDG GMS04, two method blanks were analyzed with the following compound detected:

Method Blank: VBLK01

Compound	Concentration (ug/kg)
Chlorobenzene	150J

No compounds were detected in method blank VBLK02. No qualification of the Site M samples was necessary, based on the method blank results, since either the compound listed above was not detected in the samples, or the concentration of the compound listed above that was detected in the samples was greater than five times the blank concentration.

The following compounds were detected in the Site M equipment blank:

Compound	Concentration (ug/kg)
Methylene chloride	1J
Chloroform	21
1,1,1-Trichloroethane	2J

No qualification of the Site M samples was necessary based on the equipment blank results since the compounds listed above were not detected in the samples.

Semivolatiles: For SDG GMS01, three method blanks were analyzed with the following compounds detected:

Method Blank: SBLK01

Compound	Concentration (ug/kg)
bis(2-Ethylhexyl)phthalate	2900

Method Blank: SBLK03 Instrument ID: MSG

Compound	Concentration (ug/kg)
2-Chlorophenol	8J
Butylbenzylphthalate	7J
bis(2-Ethylhexyl)phthalate	45J

Method Blank: SBLK03 Instrument ID: MSF

Compound	Concentration (ug/kg)
2-Chlorophenol	8J
Butylbenzylphthalate	5J
bis(2-Ethylhexyl)phthalate	45J

No compounds were detected in method blank SBLK02. bis(2-Ethylhexyl)phthalate was detected in method blank SBLK01 at a concentration higher than allowed by the method criteria, therefore, bis (2-ethylhexyl)phthalate detected in associated samples GML5 (7-8.5'), GML4 (8-10'), GML3 (9-11'), PA-B1 (0-2'), and PA-B1 (0-2')RE was qualified as unusable (R). bis(2-Ethylhexyl)phthalate was not detected in any of the other associated samples, and therefore, in the data reviewer's opinion, no further qualification of the bis(2-ethylhexyl)phthalate results was necessary. The following sample result was qualified as not detected (U) based on the associated method blank results:

Sample ID	Compound	Concentration (ug/kg)
GML3 (9-11')RX	2-Chlorophenol	450U

No compounds were detected in the equipment blank associated with the Dead Creek samples. bis (2-Ethylhexyl)phthalate at an estimated concentration of 1 ug/L was detected

in the equipment blank associated with the Site L samples. No further qualification of the Site L samples was necessary since either bis(2-ethylhexyl)phthalate was not detected or bis(2-ethylhexyl)phthalate was already qualified based on the method blank results.

For SDG GMS02, no compounds were detected in any of the blanks. For SDG GMS03, one method blank was analyzed twice on two instruments. No compounds were detected in method blank SBLK01 analyzed using instrument MSD. bis(2-Ethylhexyl)phthalate was the only compound detected in method blank SBLK01 analyzed using instrument MSF at an estimated concentration of 21 ug/kg. No qualification of the data was necessary since bis(2-ethylhexyl)phthalate was not detected in any of the associated samples. For SDG GMS04, two method blanks were analyzed with the following compounds detected:

Method Blank: SBLK01

Compound	Concentration (ug/L)
bis(2-Ethylhexyl)phthalate	0.3J

Method Blank: SBLK02

Compound	Concentration (ug/kg)
Butylbenzylphthalate	9J
bis(2-Ethylhexyl)phthalate	9J

No qualification of the samples was necessary since the compounds listed above were not detected or were already qualified based on the method blank results.

Pesticides/PCBs: No compounds were detected in any of the blanks.

PCBs: No compounds were detected in any of the blanks.

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MEMORANDUM

To: Brian Blum

From: Lauren Sjogren

Date: February 14, 1992

Subject: Review of the Analytical Results of the Sediment and Water Samples Collected for a Site Investigation for Dead Creek Sector B and Sites L and M, Sauget-Cahokia, Illinios

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Seven sediment samples and one water sample were collected at Dead Creek Sector B and Sites L and M, Sauget-Cahokia, Illinois on January 7 and January 8, 1992, respectively. All samples were collected in accordance with the Geraghty & Miller, Inc. Work Plan (September 1991).

The water sample was analyzed by Savannah Laboratories for the Target Compound List/Target Analyte List (TCL/TAL) parameters. Sediment sample M-4A was analyzed for TCL polychlorinated biphenyls (PCBs), TCL volatile compounds and TCL semivolatile compounds. The other six sediment samples were analyzed for TCL PCB compounds. Review of the data was performed following the quality assurance/quality control (QA/QC) criteria set forth in the methods used to analyze the samples, the United States Environmental Protection Agency (USEPA) Laboratory Data Validation Functional Guidelines for Evaluating Organic Analyses, February 1988, and the United States Environmental Protection Agency (USEPA) Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses, July 1988. One Geraghty & Miller, Inc. Level III data package was provided by the laboratory with the samples contained in this data package listed in Table 1. The review of the chemical data included checking the following:

- Holding times.
- Blank results.
- Surrogate recoveries.
- Matrix spike/matrix spike duplicate (MS/MSD) results.

The quality of the data presented in the data packages is acceptable with the qualifications described below.

Savannah Laboratories Project Numbers 40102 and 40122.

ORGANIC DATA REVIEW

I. HOLDING TIMES

All samples were analyzed within the proper holding times.

II. BLANK RESULTS

No compounds were detected in any of the blanks.

III. SURROGATE RECOVERIES

Volatiles: Two surrogate spike recoveries were outside QC limits for Sample M-4A. Sample M-4A was also analyzed as the MS/MSD sample. Two surrogate spike recoveries were also found to be outside QC limits for this MS/MSD. No compounds were detected in Sample M-4A, therefore, all non-detects were qualified as estimated (UJ). For all the other samples and all the blanks, all surrogate spike recoveries were within QC limits.

Semivolatiles: All surrogate spike recoveries were within QC limits.

Pesticides/PCBs: All surrogate spike recoveries were within QC limits.

PCBs: No surrogate spike recoveries were reported for the six sediment samples analyzed because they were diluted out. All blanks surrogate spike recoveries were within QC limits.

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IV. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Sample M-4A was designated to be the sediment MS/MSD. No water sample was designated to be the MS/MSD, therefore, the laboratory provided the results of a blank spike/blank spike duplicate. The results of the MS/MSD and the blank spike/blank spike duplicate were reviewed for all the analyses performed. In the data reviewer's opinion, no qualification of the data was necessary based on the MS/MSD and the blank spike/blank spike duplicate results.

V. INTERNAL STANDARD PERFORMANCE

For the volatile and semivolatile analyses performed, internal standards were spiked into every sample and blank. The internal standard results were not reviewed because the internal standard summaries were not included and are not required to be reported in a Level III data package.

IV. OVERALL ASSESSMENT OF THE DATA

The data were found to be acceptable with the qualifications described above.

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INORGANIC DATA REVIEW

I. HOLDING TIMES

All analyses were performed within the proper holding times.

II. BLANKS

No analytes were detected in any of the blanks.

III. ICP INTERFERENCE CHECK SAMPLE

All inductively coupled plasma (ICP) interference check sample results were acceptable.

IV. LABORATORY CONTROL SAMPLE

All laboratory control sample results were acceptable.

V. DUPLICATE SAMPLE RESULTS

Batch specific sample results were provided by the laboratory since a site specific duplicate was not requested. All duplicate results were acceptable.

VI. MATRIX SPIKE SAMPLE RESULTS

Batch specific sample results were provided by the laboratory since a site specific matrix spike was not requested. All matrix spike results were acceptable.

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VII. FURNACE ATOMIC ABSORPTION QC

Lead and thallium post-digestion spike recoveries were outside of QC limits for Sample Site M-South Shore. The positive lead result was qualified as estimated (J) and the non-detect thallium result was qualified as estimated (UJ). All other post-digestion spike recoveries were within QC limits.

VIII. ICP SERIAL DILUTION

All ICP serial dilution results were acceptable.

IX. OVERALL ASSESSMENT OF THE DATA

The data were found to be acceptable with the qualifications described above.

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Table 1. Sample and Laboratory Identification of the Samples Collected on January 7 through January 8, 1992 at Dead Creek Sector B and Sites L and M, Sauget-Cahokia, Illinois.

Sample I.D.	Laboratory I.D.
Site M - South Shore	401221
M-1A	401021
M-2A	401022
M-3A	401023
M-4A	401027
M-5A	401024
M-6A	401025
M-7A	401026
Trip Blank	4010212

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III. SURROGATE RECOVERIES

Volatiles: For SDG GMS01, one surrogate spike recovery was outside QC limits for sample PA-B1 (0-2'). One surrogate spike recovery was also found to be outside QC limits for the reanalysis of sample PA-B1 (0-2'). All compounds detected in sample PA-B1 (0-2') and the reanalysis of this sample were qualified as estimated (J) and all non-detects were qualified as estimated (UJ).

For SDG GMS02, two surrogate spike recoveries were outside QC limits for sample PD-B1 (0-1.5'). One surrogate spike recovery was also found to be outside QC limits for the reanalysis of sample PD-B1 (0-1.5'). All compounds detected in sample PD-B1 (0-1.5') and the reanalysis of this sample were qualified as estimated (J) and all non-detects were qualified as estimated (UJ).

For SDG GMS03, all surrogate spike recoveries were outside QC limits for the analysis of sample PJ-B2 (0-1.5'). All surrogate spike recoveries were within QC limits for the reanalysis of sample PJ-B2 (0-1.5'). All compounds detected in the initial analysis of sample PJ-B2 (0-1.5') were qualified as estimated (J) and all non-detects were qualified as estimated (UJ).

For SDG GMS04, surrogate spike recoveries were within QC limits for all the samples and blanks analyzed.

Semivolatiles: For SDG GMS01, no surrogate spike recoveries were reported for the following samples because they were diluted out:

GML1 (3-8')	GML1 (3-8')DL
GML2 (8-10')	GML2 (8-10')RE
PA-B1 (0-2')	PA-B1 (0-2')RE
PA-B1 (0-2')RX	

All other samples and all blanks surrogate spike recoveries were within QC limits.

For SDG GMS02, surrogate spike recoveries were within QC limits for all samples and blanks.

For SDG GMS03, no surrogate spike recoveries were reported for the dilution and analysis of sample PJ-B2 (0-1.5') because they were diluted out. All other samples and all blanks surrogate spike recoveries were within QC limits.

For SDG GMS04, surrogate spike recoveries were within QC limits for all samples and blanks.

Pesticides/PCBs: For SDG GMS01, no surrogate spike recoveries were reported for the following samples because they were diluted out:

PA-B1 (0-2')	GML1 (3-8')

All blanks surrogate spike recoveries were within QC limits.

For SDG GMS02, no surrogate spike recoveries were reported for the following samples because they were diluted out:

PC-B1 (0-1.5')	PD-B1 (0-1.5')
PE-B1 (0-2')	PF-B1 (0-2')
PG-B1 (0-2')	PH-B1 (0-2')

All blanks surrogate spike recoveries were within QC limits.

For SDG GMS03, no surrogate spike recoveries were reported for the following samples because they were diluted out:

PI-B2 (0-2') PJ-B2 (0-1.5')

All blanks surrogate spike recoveries were within QC limits.

For SDG GMS04, no surrogate spike recoveries were reported for sample M3 (0-8'). All blanks surrogate spike recoveries were within QC limits.

PCBs: For SDGs GMS01 and GMS02, surrogate spike recoveries were within QC limits for all samples and blanks.

A sulfuric acid clean-up was performed for all the samples in SDGs GMS03 and GMS04. Since sulfuric acid was used, surrogate compound dibutylchlorendate (DBC) degraded in these samples. However, the laboratory also spiked these samples with surrogate compound tetrachloro-m-xylene because of the DBC degradation problem, with the recovery of this compound found to be within QC limits for all the samples that were not diluted. No surrogate spike recoveries reported for the dilution and analysis of sample M2 (0-3.5') because they were diluted out.

IV. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Three samples were designated to be the matrix spike/matrix spike duplicate (MS/MSD) samples. The results of the three MS/MSDs were reviewed for all the analyses performed. In the data reviewer's opinion, no qualification of the data was necessary based on the MS/MSD results.

V. INTERNAL STANDARD PERFORMANCE

For the volatile and semivolatile analyses performed, internal standards were spiked into every sample and blank with the results discussed below.

Volatiles: The following samples had internal standard area counts outside of QC limits:

SDG	Sample ID	Internal Standard
GMS01	PA-B1 (0-2')	1,4-Difluorobenzene
		Chlorobenzene-d_5
	GML5 (7-8.5')	1,4-Difluorobenzene
		Chlorobenzene-d_5
		Bromochloromethane
	GML3 (9-11')	1,4-Difluorobenzene
	PA-B1 (0-2')RE	1,4-Difluorobenzene
		Chlorobenzene-d_5
GMS02	PD-B1 (0-1.5')	Chlorobenzene-d_5
	PD-B1 (0-1.5')RE	Chlorobenzene-d_5
GMS03	PJ-B2 (0-1.5')	1,4-Difluorobenzene
		Chlorobenzene-d_5
		Bromochloromethane

Positive results for the compounds detected in the samples listed above and quantitated using the internal standards listed above were qualified as estimated (J). Non-detects for the samples listed above and quantitated using the internal standards listed above were qualified as estimated (UJ). A listing of compounds quantitated using the internal standards is found in Table 2.

Semivolatiles: The following samples had internal standard area counts outside of QC limits:

SDG	Sample ID	Internal Standard
GMS01	PA-B1 (0-2')	Perylene-d_{12}
	GML2 (8-10')	Chrysene-d_{12}
		Perylene-d_{12}
	GML2 (8-10')RE	Chrysene-d_{12}
		Perylene-d_{12}
	PA-B1 (0-2')RE	Perylene-d_{12}
GMS02	PF-B1 (0-2')	Perylene-d_{12}
		Chrysene-d_{12}
	PF-B1 (0-2')RE	Perylene-d_{12}
		Chrysene-d_{12}
	PH-B1 (0-2')	Perylene-d_{12}
		Chrysene-d_{12}
	PH-B1 (0-2')RE	Perylene-d_{12}
	PE-B1 (0-2')	Perylene-d_{12}
		Chrysene-d_{12}
	PE-B1 (0-2')RE	Perylene-d_{12}
	PD-B1 (0-2')	Perylene-d_{12}
		Chrysene-d_{12}
GMS03	PI-B2 (0-2')	Perylene-d_{12}
		Chrysene-d_{12}
	PJ-B2 (0-1.5')	Perylene-d_{12}
		Chrysene-d_{12}
		Phenanthracene
	PJ-B2 (0-1.5')RE	Perylene-d_{12}
		Chrysene-d_{12}
		Phenanthracene

Positive results for the compounds detected in the samples listed above and quantitated using the internal standards listed above were qualified as estimated (J). Non-

detects for the samples listed above and quantitated using the internal standards listed above were qualified as estimated (UJ). A listing of compounds quantitated using the internal standards is found in Table 3. Samples PI-B2 (0-2') and PD-B1 (0-1.5') were designated for the MS/MSD analyses with the same internal standard areas were found to be outside QC limits.

IV. OVERALL ASSESSMENT OF THE DATA

Volatiles: Sample PA-B1 (0-2') was diluted and reanalyzed because the concentration of chlorobenzene exceeded the calibration range of the instrument. The diluted result for chlorobenzene and the initial results for the other compounds should be used when reporting the volatile results.

Sample PD-B1 (0-1.5') was reanalyzed because surrogate spikes and internal standard area counts were outside QC limits. Surrogate spikes and internal standard area counts were also outside QC limits for the reanalysis of sample PD-B1 (0-1.5'). In the data reviewer's opinion, the initial analysis of sample PD-B1 (0-1.5') should be used when reporting the volatile results.

Sample PJ-B2 (0-1.5') was diluted and reanalyzed because the concentration of chlorobenzene exceeded the calibration range of the instrument. The diluted result for chlorobenzene and the initial results for the other compounds should be used when reporting the volatile results. It should be noted that methylene chloride and 2-butanone were detected in the reanalysis of the sample and were not detected in the initial analysis. In the data reviewer's opinion, the presence of these compounds is due to laboratory contamination.

Semivolatiles: Sample PA-B1 (0-2') was reanalyzed because one of the internal standard area counts was outside QC limits. The same internal standard had area counts outside QC limits for the reanalysis of sample PA-B1 (0-2'). Sample PA-B1 (0-2') was also reextracted

and reanalyzed a third time because the concentration of bis(2-ethylhexyl)phthalate in method blank associated with the initial extraction of PA-B1 (0-2') was higher than allowed following the method blank criteria. The reextraction of sample PA-B1 (0-2') was performed beyond the holding time. The reextraction and reanalysis of sample PA-B1 (0-2') should be used to report the concentration of bis(2-ethylhexyl)phthalate and the initial analysis should be used to report all the other semivolatile compounds. Sample GML3 (9-11') was also reextracted and reanalyzed because the concentration of bis(2-ethylhexyl)phthalate in the associated method blank was higher than allowed following the method blank criteria. The reextraction of sample GML3 (9-11') was performed beyond the holding time. The reextraction and reanalysis of sample GML3 (9-11') should be used to report the concentration of bis(2-ethylhexyl)phthalate and the initial analysis should be used to report all the other semivolatile compounds.

Sample GML2 (8-10') was reanalyzed because two internal standard area counts were found to be outside QC limits. The sample was reanalyzed with the same internal standard area counts found to be outside QC limits. The initial analysis should be used when reporting the data, however, since both analyses have the same internal standard area counts outside QC limits, either analysis could have been chosen.

Sample GML1 (3-8') was diluted and reanalyzed because of the high concentrations of 1,4-dichlorobenzene and 1,2,4-trichlorobenzene detected in the sample. The reanalysis of GML1 (3-8') should be used to report the concentrations of 1,4-dichlorobenzene and 1,2,4-trichlorobenzene and the initial analysis should be used to report all the other semivolatile compounds.

Sample PF-B1 (0-2') was reanalyzed since area counts for two of the internal standards were outside QC limits. Area counts for the same two internal standards were outside QC limits for the reanalysis of sample PF-B1 (0-2'). This sample was diluted and analyzed a third time since the concentration of pyrene, 1,2-dichlorobenzene, and 1,2,4-trichlorobenzene exceeded the calibration range of the method for one of the two previous

analyses. In the data reviewer's opinion, the diluted results for pyrene, 1,2-dichlorobenzene, and 1,2,4-trichlorobenzene and the initial results for the other compounds should be used when reporting the results of sample PF-B1 (0-2').

Area counts for two internal standards were outside QC limits for samples PH-B1 (0-2') and PE-B1 (0-2'). Both samples were reanalyzed with area counts for one internal standard found to be outside QC limits for each sample. The reanalysis of samples PH-B1 (0-2') and PE-B1 (0-2') should be used when reporting the data since one instead of two internal standard area counts were outside of QC limits for the reanalysis of both these samples.

Area counts for two internal standards were outside QC limits for samples PD-B1 (0-1.5') and PI-B2 (0-2'). Both these samples were designated for MS/MSD analyses. Analyzed as MS/MSDs, area counts for the same internal standards were found to be outside QC limits. The initial analysis of these samples should be used when reporting the data.

Sample PJ-B2 (0-1.5') was reanalyzed since area counts for three internal standards were outside QC limits. Area counts for the same three internal standards were outside QC limits for the reanalysis of sample PJ-B2 (0-1.5'). This sample was diluted and analyzed a third time since the concentration of pyrene exceeded the calibration range of the method for the two previous analyses. In the data reviewer's opinion, the diluted results for pyrene and the initial results for the other compounds should be used when reporting the results of sample PJ-B2 (0-1.5').

The data were found to be acceptable with the qualifications described above.

INORGANIC DATA REVIEW SUMMARY

I. HOLDING TIMES

The following samples were analyzed for mercury up to two days past the functional guidelines holding time of 28 days from time of collection:

GML1 (3-8')	GML5 (7-8.5')
GML4 (8-10')	GML2 (8-10')
GML3 (9-11')	Site L Equipment Blank

The samples listed above were analyzed for the other inorganic parameters within the functional guidelines specified holding times. Mercury detected in the samples listed above were qualified as estimated (J) and the non-detect mercury results for the samples listed above were qualified as estimated (UJ). All other samples were analyzed for the inorganic parameters within the functional guidelines specified holding times.

II. BLANKS

The only analyte detected in all the initial calibration blanks, continuing calibration blanks and preparation blanks analyzed was zinc at a concentration of 5.5 milligrams per kilogram (mg/kg) detected in the soil preparation blank contained in SDG GMS02. No qualification of the zinc sample results associated with this blank was necessary since the concentrations were greater than five times the blank concentration. The following analytes were detected in the equipment blanks:

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Equipment Blank-Site L

Analyte	Concentration (ug/L)
Calcium	341B
Iron	151
Sodium	997B

Equipment Blank-Dead Creek 10/21/91 1330

Analyte	Concentration (ug/L)
Barium	40.8B
Calcium	844B
Copper	68.9
Iron	435
Lead	5.5
Magnesium	168B
Sodium	8140
Zinc	140

Equipment Blank-Dead Creek 10/21/91 1500

Analyte	Concentration (ug/L)
Calcium	462B
Iron	98.4B
Sodium	665B
Zinc	375

Equipment Blank-Dead Creek 10/24/91

Analyte	Concentration (ug/L)
Calcium	497B
Iron	171
Zinc	29.7

Equipment Blank-Site M

Analyte	Concentration (ug/L)
Calcium	395B
Copper	81.4

The "B" qualifier indicates that the concentration is above the instrument detection limit (IDL) and below the contract required detection limit (CRDL).

The following sample results were qualified as non-detects (U) due to the equipment blank results:

Sample ID	Analyte	Concentration (mg/kg)
GML1 (3-8')	Sodium	295U
GML4 (8-10')	Sodium	332U
GML2 (8-10')	Sodium	226U
GML3 (9-11')	Sodium	303U
PA-B1 (0-2')	Sodium	225U
PA-B2 (2-4')	Copper	28.3U
	Sodium	251U
	Zinc	106U
PA-B3 (5-6')	Copper	29.9U
	Sodium	269U
PB-B2 (4-6')	Copper	21.8U
	Sodium	281U
	Zinc	65.0U
PB-B3 (2-4')	Sodium	304U
	Zinc	133U
PF-B1	Sodium	355U
PG-B1	Sodium	307U
PH-B1	Sodium	203U
PF-B2	Sodium	178U
PF-B3	Copper	26.7U
PF-B3	Sodium	186U
PF-B3	Zinc	69.4U
PG-B2	Copper	16.9U
PG-B2	Sodium	137U
PG-B2	Zinc	412U
PG-B3	Copper	72.5U
PG-B3	Sodium	149U
PH-B2	Copper	26.5U
PH-B2	Sodium	131U
PH-B3	Copper	19.3U
PH-B3	Sodium	149U
PC-B1	Sodium	300U

Sample ID	Analyte	Concentration (mg/kg)
PD-B1	Sodium	362U
PE-B1	Sodium	446U
PC-B2	Copper	66.1U
PC-B2	Sodium	254U
PC-B3	Sodium	221U
PD-B3	Copper	28.8U
PD-B3	Sodium	211U
PD-B3	Zinc	94.9U
PE-B2	Copper	29.0U
PE-B2	Sodium	276U
PE-B2	Zinc	84.2U
PE-B3	Copper	33.0U
PE-B3	Sodium	177U
PD-B2	Copper	46.8U
PD-B2	Sodium	231U

III. ICP INTERFERENCE CHECK SAMPLE (ICS)

The percent recoveries for all the ICS analyses were within the control limits of ± 20% of the true value.

IV. LABORATORY CONTROL SAMPLE (LCS)

All LCS results were within the control limits.

V. DUPLICATE SAMPLE ANALYSIS

Sample GML1 (8-14') was designated for the Site L duplicate analysis. Samples PD-B1 (0-1.5') and PD-B2 (2-4') were designated for the Dead Creek duplicate analysis for the samples collected on October 18 through October 23, 1991. Sample PI-B2 (0-2') was designated for the Dead Creek duplicate analysis for the samples collected on October 24, 1991. Sample M3 (0-8') was designated for the Site M duplicate analysis. For the duplicate analysis of sample GML1 (8-14'), the RPD values for copper, lead, and nickel were found

to be outside the QC limits. Therefore, the copper, lead, and nickel results for the Site L samples were qualified as estimated (J). For the duplicate analysis of sample PD-B1 (0-1.5'), the RPD values for nickel and selenium were found to be outside the QC limits. Therefore, the nickel and selenium results for the Dead Creek samples collected on October 18 through October 23, 1991 were qualified as estimated (J). For the duplicate analysis of sample PD-B2 (2-4'), all RPD values were found to be within the QC limits. For the duplicate analysis of sample PI-B2 (0-2'), the RPD value for aluminum was found to be outside the QC limits. Therefore, the aluminum results for the Dead Creek samples collected on October 24, 1991 were qualified as estimated (J). All RPD values were found to be within QC limits for the duplicate analysis of sample M3 (0-8').

VI. MATRIX SPIKE SAMPLE ANALYSIS

Sample GML1 (8-14') was designated for the Site L matrix spike analysis. Samples PD-B1 (0-1.5') and PD-B2 (2-4') were designated for the Dead Creek matrix spike analysis for the samples collected on October 18 through October 23, 1991. Sample PI-B2 (0-2') was designated for the Dead Creek matrix spike analysis for the samples collected on October 24, 1991. Sample M3 (0-8') was designated for the Site M matrix spike analysis. Sample GML1 matrix spike recoveries were outside of QC limits for antimony, copper, nickel, zinc, and cyanide with recoveries of 43.9, 215.6, 169.7, 10.5, and 34.8, respectively. Therefore, antimony, copper, nickel, and zine detected in the Site L samples were qualified as estimated (J) and the non-detect antimony and cyanide Site L sample results were qualified as estimated (UJ).

Sample PD-B1 (0-1.5') matrix spike recoveries were outside of QC limits for antimony, cadmium, manganese, selenium, silver, and thallium with recoveries of 66.8, 404.5, 135.7, -143.4, 59.9, and 62.0, respectively. Sample PD-B2 (2-4') matrix spike recoveries were outside QC limits for antimony, arsenic, cadmium, and copper with recoveries of 35.4, 44.8, -76.8, and 175.7, respectively. Therefore, antimony, arsenic, cadmium, copper, manganese, selenium, thallium, and silver detected in the Dead Creek samples collected on October 18

through October 23, 1991 were qualified as estimated (J). The non-detect antimony, arsenic, silver, and thallium results for the Dead Creek samples collected on October 18 through October 23, 1991 were qualified as estimated (UJ). The non-detect selenium and cadmium results for the Dead Creek samples collected on October 18 through October 23, 1991 were qualified as unusable (R).

Sample PI-B2 (0-2') matrix spike recoveries were outside of QC limits for antimony, barium, cadmium, chromium, nickel, selenium, thallium, and cyanide with recoveries of 33.6, 321.1, 601.3, 190.7, 366.9, 49.1, 55.8, and 152.4, respectively. Therefore, antimony, barium, cadmium, chromium, nickel, selenium, thallium, and cyanide detected in the Dead Creek samples collected on October 24, 1991 were qualified as estimated (J). The non-detect antimony, selenium, and thallium results were qualified as estimated (UJ).

Sample M3 (0-8') matrix spike recoveries were outside of QC limits for antimony, arsenic, and cyanide with recoveries of 65.2, 60.0, and 59.4, respectively. Therefore, antimony, arsenic, and cyanide detected in the Site M samples were qualified as estimated (J) and antimony, arsenic, and cyanide non-detects were qualified as estimated (UJ).

VII. FURNACE ATOMIC ABSORPTION QC

The metals determined using Furnace Atomic Absorption included: arsenic, lead, selenium, and thallium. Duplicate injections of every sample analyzed for these metals with concentrations greater than the CRDL agreed within ± 20% RSD.

The thallium post-digestion spike recoveries for all samples contained in SDG GMS01 were outside the control limits of 85-115%. The non-detect thallium results for all these samples were qualified as estimated (UJ). The selenium post-digestion spike recoveries for samples GML1 (3-8'), GML5 (7-8.5'), GML4 (8-10'), GML2 (8-10'), PA-B2 (2-4'), and PB-B3 (2-4') were outside the control limits of 85-115%. The non-detect selenium results for these samples were qualified as estimated (UJ). The method of standard additions (MSA)

was performed for the selenium analysis of sample PA-B1 (0-2') with a correlation coefficient of <0.995 reported. As a result, the selenium detected in sample PA-B1 (0-2') was qualified as estimated (J).

The arsenic post-digestion spike recovery for Equipment Blank 1500 was outside the control limits of 85-115%. The non-detect arsenic result for this blank was qualified as estimated (UJ). The MSA was performed for the arsenic analysis of samples PE-B1 (0-2'), PC-B2 (1.5-3.5'), PG-B2 (2-4'), and PH-B3 (4-6') with correlation coefficients of <0.995 reported. The arsenic detected in these samples was qualified as estimated (J). The MSA was performed for the selenium analysis of samples PC-B1 (0-1.5') and PE-B1 (0-2') with correlation coefficients of <0.995 reported. The selenium detected in these two samples was qualified as estimated (J). The selenium post-digestion spike recoveries for the following samples were outside the control limits of 85-115%.

PC-B2 (1.5-3.5')	PC-B3 (3.5-5.5')
PD-B2 (2-4')	PE-B2 (4-6')
PE-B3 (2-4')	Equipment Blank 1330
PF-B2 (2-4')	Equipment Blank 1500
PF-B3 (4-6')	PG-B2 (2-4')
PG-B3 (4-6')	PH-B3 (4-6')

Selenium detected in the samples listed above was qualified as estimated (J) and selenium not detected in the samples listed above was qualified as estimated (UJ). With the exception of Equipment Blank 1330 and sample PD-B2 (2-4'), thallium post-digestion spike recoveries for all the samples in SDG GMS02 were outside the control limits of 85-115%. Since thallium was not detected in any of these samples, all thallium results were qualified as estimated (UJ).

The MSA was performed for the arsenic analysis of sample PJ-B2 (0-1.5') with a correlation coefficient of <0.995 reported. The arsenic detected in this sample was qualified

as estimated (J). The MSA was performed for the selenium analysis of sample PI-B2 (0-2') with a correlation coefficient of <0.995 reported. The selenium detected in this sample was qualified as estimated (J). The selenium post-digestion spike recoveries were outside the control limits of 85-115% for samples PJ-B2 (0-1.5'), PI-B3 (1.5-3'), and PJ-B1 (3-5'). The non-detect selenium results for these three samples were qualified as estimated (UJ). The thallium post-digestion spike recoveries for all the samples contained in SDG GMS03 were outside the control limits of 85-115%. Thallium was not detected in any of these samples, therefore, all thallium non-detects were qualified as estimated (UJ).

The selenium post-digestion spike recoveries were outside the control limits of 85-115% for samples M2 (0-3.5') and M3 (0-8'). The non-detect selenium results for these two samples were qualified as estimated (UJ). The thallium post-digestion spike recoveries were outside the control limits of 85-115% for samples M1 (0-3'), M2 (0-3.5'), and M3 (0-8'). The non-detect thallium results for these three samples were qualified as estimated (UJ).

VIII. ICP SERIAL DILUTION

Sample GML1 (8-14') was designated for the Site L ICP serial dilution analysis with the percent difference between the initial zinc sample concentration and the diluted zinc concentration found to be 10.9% which exceeds the QC limit of 10%. As a result, all Site L zinc results were qualified as estimated (J) if detected and estimated (UJ) if not detected. All other Site L ICP serial dilution results were acceptable. All Dead Creek and Site M ICP serial dilution results were acceptable.

IX. OVERALL ASSESSMENT OF THE DATA

The data were found to be acceptable with the qualifications described.

TCLP DATA REVIEW SUMMARY

The TCLP data were reviewed with all extraction and analysis holding times found to be acceptable. The TCLP results were compared to the regulatory limits listed in the September 1991 Work Plan. No parameter concentrations exceeded these regulatory limits.

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Table 1. Sample and Laboratory Identification of the Sediment/Fill Boring Collected at Dead Creek Sector B and Sites L and M, Sauget-Cahokia, Illinois.

Sample I.D.	Laboratory I.D.
Sample Delivery Group No. GMS01	
GML1 (8-14')	662101
GML1 (3-8')	662102
GML5 (7-8.5')	662103
GML4 (8-10')	662104
GML2 (8-10')	662105
GML3 (9-11')	662106
Equipment Blank	662107
PA-B1 (0-2')	667401
PB-B1 (0-2')	667402
PA-B2 (2-4')	667403
PA-B3 (5-6')	667404
PB-B2 (4-6')	667405
PB-B3 (2-4')	667406
Sample Delivery Group No. GMS02	
PC-B1	669701
PD-B1	669702
PE-B1	669703
PC-B2	669704
PC-B3	669705
PD-B2	669706
PD-B3	669707
PE-B2	669708
PE-B3	669709
Equipment Blank 1330	669714
Equipment Blank 1500	669715
PF-B1	703101
PG-B1	703102
PH-B1	703103
PF-B2	703104
PF-B3	703105
PG-B2	703106
PG-B3	703107
PH-B2	703108
PH-B3	703109

Table 1. Sample and Laboratory Identification of the Sediment/Fill Boring Collected at Dead Creek Sector B and Sites L and M, Sauget-Cahokia, Illinois.

Sample I.D.	Laboratory I.D.
Sample Delivery Group No. GMS01	
PI-B2	705501
PJ-B2	705502
PI-B1	705503
PI-B3	705504
PJ-B1	705505
PJ-B3	705506
Equipment Blank	705509
Sample Delivery Group No. GMS04	
M1	726601
M2	726602
M3	726603
Equipment Blank	726608

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Table 2. Volatile Internal Standards With Corresponding TCL Analytes Assigned for Quantitation.

Bromochloromethane	1,4-Difluorobenzene	Chlorobenzene-d_5
Chloromethane	1,1,1-Trichloroethane	2-Hexanone
Bromomethane	Carbon tetrachloride	4-Methyl-2-pentanone
Vinyl chloride	Vinyl acetate	Tetrachloroethene
Chloroethane	Bromodichloromethane	1,1,2,2-Tetrachloroethane
Methylene chloride	1,2-Dichloropropane	Toluene
Acetone	trans-1,3-Dichloropropene	Chlorobenzene
Carbon disulfide	Trichloroethene	Ethylbenzene
1,1-Dichloroethene	Dibromochloromethane	Styrene
1,1-Dichloroethane	1,1,2-Trichloroethane	Xylene (total)
1,2-Dichloroethene (total)	Benzene	Bromofluorobenzene (surr)
Chloroform	cis-1,3-Dichloropropene	Toluene-d_8 (surr)
1,2-Dichloroethane	Bromoform	
2-Butanone		
1,2-Dichloroethane-d_4 (surr)		

surr Surrogate compound.

TCL Target Compound List.

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Table 3. Semivolatile Internal Standards With Corresponding TCL Analytes Assigned for Quantitation.

Phenanthrene-d_{10}	Chrysene-d_{12}	Perylene-d_{12}
4,6-Dinitro-2-methylphenol	Pyrene	Di-n-octyl phthalate
N-nitrosodi-phenylamine	Butylbenzyl phthalate	Benzo(b)fluoranthene
1,2-Diphenylhydrazine	3,3'-Dichlorobenzidine	Benzo(k)fluoranthene
4-Bromophenyl phenyl ether	Benzo(a)-anthracene	Benzo(a)pyrene
Hexachlorobenzene	bis(2-Ethylhexyl) phthalate	Indeno(1,2,3-cd) pyrene
Pentachlorophenol	Chrysene	Dibenz(a,h)anthracene
Phenanthrene	Terphenyl-d_{14} (surr)	Benzo(g,h,i)perylene
Anthracene		
Di-n-butyl phthalate		
Fluoranthene		

TCL Target Compound List.

surr Surrogate compound.